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ABSTRACT

The "Plain Talk about K.I.D.S. (Kids Inclined toward Difficulty in School)" summit on learning disorders was held in 1995 to bring together experts in the field of learning disorders to help disseminate the knowledge that will bring progress in the educational management of students who have difficulty in school. The first 10 chapters present papers from the conference, grouped into sections on health care, education, justice, and family. Chapters 11 and 12 present discussions among experts, focusing on collaborative management and national issues in the field. Chapters 13 through 17 present panel discussions on educational change, parent participation, the role of the arts, the role of health care, and justice. The 10 conference papers are: (1) "The Disabling of Labeling: A Phenomenological Approach to Understanding and Helping Children Who Have Learning Disorders" (Melvin D. Levine and Carl W. Schwartz); (2) "The Emotional Experience of Learning" (Edward M. Hallowell); (3) "Attention and Learning Problems: Strategies for Primary Care Physicians" (Gerard Ballanco); (4) "The Learning That Comes before Learning" (Betty Edwards); (5) "Pride, Intellect, Language, and Emotion: Reaching to the Heart, Teaching to the Head" (Priscilla Vail); (6) "The Language Continuum: Learning Language and Using Language To Learn, the Twin Tasks of Childhood" (Katharine G. Butler); (7) "Math: Identifying Problems and Effective Strategies" (Joyce Steeves); (8) "Making the Connections: Juvenile Justice and Learning Disorders" (Thomas P. McGee); (9) "Intrinsic, Extrinsic, and Educational Influences That Predispose a Child to Anomalous Development of Prosocial Behavior" (G. Emerson Dickman, III); and (10) "The Parents' Role: Things To Know and Ways To Help" (Alice P. Thomas and Ann Kornblett). Each paper contains references. (Contains six figures and four tables.) (SLD)

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PLAIN TALK ABOUT K.I.D.S.*

*Kids Inclined Toward Difficulty In School

A SUMMIT ON LEARNING DISORDERS: Transforming Crisis Into Success

A Joint Endeavor:

The Louisiana Children's Research Center for Development and Learning

LSU Medical Center • New Orleans Adolescent Hospital • Children's Hospital of New Orleans

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*Plain Talk About K.I.D.S.**

**Kids Inclined Toward Difficulty In School*

❦ ❦ ❦

A Summit on Learning Disorders: Transforming Crisis Into Success

ALICE P. THOMAS, M.ED.

EDITOR

Executive Director
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This book is dedicated to
George Emerson "Dick" Dickman IV,
in memory of all he did during his brief lifetime
to educate others to celebrate diversity.
We give tribute to him as a gentle yet compelling teacher.

Contents

Foreword *ix*

Preface *xi*

Acknowledgments *xv*

I. Health Care

Chapter One *1*

The Disabling of Labeling: A Phenomenological Approach to Understanding and Helping Children Who Have Learning Disorders
MELVIN D. LEVINE, M.D. AND CARL W. SWARTZ, PH.D.

Chapter Two *15*

The Emotional Experience of Learning
EDWARD M. HALLOWELL, M.D.

Chapter Three *25*

Attention and Learning Problems: Strategies for Primary Care Physicians
GERARD BALLANCO, M.D.

II. Education

Chapter Four *37*

The Learning that Comes before Learning
BETTY EDWARDS, ED.D.

Chapter Five 43

Pride, Intellect, Language, and Emotion: Reaching to the Heart, Teaching to the Head
PRISCILLA VAIL, M.A.T.

Chapter Six 59

The Language Continuum: Learning Language and Using Language to Learn, the Twin Tasks of Childhood
KATHARINE G. BUTLER, PH.D.

Chapter Seven 69

Math: Identifying Problems and Effective Strategies
JOYCE STEEVES, ED.D.

III. Justice

Chapter Eight 83

Making the Connections: Juvenile Justice and Learning Disorders
THE HONORABLE THOMAS P. MCGEE

Chapter Nine 87

Intrinsic, Extrinsic, and Educational Influences that Predispose a Child to Anomalous Development of Prosocial Behavior
G. EMERSON DICKMAN III, J.D.

IV. Family

Chapter Ten 99

The Parents' Role: Things to Know and Ways to Help
ALICE P. THOMAS, M.ED.
ANN KORNBLET

V. Open Dialogue Among the Experts

Chapter Eleven 115

Collaborative Management

Chapter Twelve 135

National Issues / National Focus

VI. *Panel Discussions*

Chapter Thirteen 155
Educational Reform and Professional Development

Chapter Fourteen 169
Parents' Role / School's Role

Chapter Fifteen 179
Role of the Arts

Chapter Sixteen 185
Role of Health Care

Chapter Seventeen 193
Justice

Epilogue 201

Appendix 203
Resource Organizations
About the Authors

Foreword

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On the bottom rung of our social spectrum we have a few misguided or sick individuals who are incarcerated, while at the other end we have the successful who are happily adjusted and often chasing quixotic dreams. Most of our society is somewhere in between, striving for a better existence. It appears that the one primary difference between the people at both ends of the spectrum is education.

How horrifically confining to a person with the mental ability to learn not to be able to grasp concepts, read, listen, or master other skills necessary to achieve an education. This frustration lowers self-image, destroys incentive and desires, and oftentimes leads to incarceration.

We are moving forward in conquering our social ills in many arenas. Learning disorders, which can truly be classified as a social ill because they rob our society of much productivity from people who are otherwise very capable, is one such arena. Rapid advances in knowledge have enabled a few professionals to better identify, categorize, understand, and treat learning disorders. For example, a short time has transpired since one type of disorder which affects learning was classified broadly and simply as Attention Deficit Disorder (ADD) with a general scheme of treatment which the medical field now acknowledges as wholly inadequate. This old, outmoded ADD classification has been defined and redefined as hyperkinesis, hyperactivity, Attention Deficit Disorder with and without hyperactivity, undifferentiated Attention Deficit Disorder, Attention Deficit/Hyperactivity Disorder - combined type, Attention Deficit/Hyperactivity Disorder - predominately hyperactive-impulsive type, and Attention Deficit/Hyperactivity Disorder - predominately inattentive type. All of this has been done in a continued effort to clarify and become more specific. Indeed, as ADD splinters into more and more specific subtypes, Dr. Mel Levine believes that we might eventually discard the broad handle "ADD" as meaning nothing!

Yet, the knowledge in this field is in the hands of only a few truly brilliant professionals. To take advantage of these advances in the treatment of learning disorders, our society must determine how to diseminate this information, which necessarily includes correcting misinformation and myths which have unfortunately complicated the treatment process. Not only must this information be converted into teaching and training techniques and procedures, but our teachers, physicians, mental health professionals, judges, and parents must be trained and the general public acquainted with this information. I get the feeling that medical

and other research knowledge in our struggle to treat learning disorders is moving forward at the speed of light while the process of achieving a practical application of this knowledge is moving forward on horseback.

It was with dissemination of this knowledge in mind that the Louisiana Children's Research Center for Development and Learning was created, that the summit *Plain Talk about K.I.D.S.* was conceived, and that this book is being published. Hopefully, physicians, educators, mental health professionals, judges, law enforcement officials, parents, and the many other affected groups and individuals will all glean meritorious information from the following pages.

The Honorable John W. Greene
Chief Judge, 22nd Judicial Court, State of Louisiana
President, Louisiana Children's Research Center for
Development and Learning

Preface

Several years ago, my husband David and I received a copy of the first evaluation of our six-year-old son at the exit 'interpretative' session. As the evaluator handed us the report, she smiled and wished us "good luck." I remember how we felt at that moment as though it were yesterday. As David and I stood on the sidewalk outside the hospital where the evaluation had taken place, holding the thick, twenty-page report in our hands, we felt alone, worried, and confused as to what to do and where to go next. It was the same feeling we'd had two months earlier when we'd met with our son's school. Smiling faces and waving hands, but no help to coordinate the needed services.

So began a long journey with no road map. Realizing the answers lay with no one person in no one place, we began scotch-taping a management plan together. As the years rolled by, we went through similar experiences with our daughter. I was struck over and over again by the lack of collaboration and coordination—*true* collaboration and coordination—among professionals, researchers, teachers, and parents. It seemed such a waste of time and energy, so inefficient, this non-collaborative style. I don't think it was intentional inefficiency; people are busy, and days are short. But it was costly inefficiency. Costly to the parents, the school, and, worst of all, the child.

Then I reentered the world of teaching after a ten-year "sabbatical" of staying home with my young children. I accepted what initially seemed like an ideal reentry position—a half-day, JTPA (Job Training Partnership Act) teaching position, teaching two classes of ninth and tenth graders, with no more than twelve students in a class and one full-time aide. What luxury, I thought. Six weeks later, I had reevaluated the situation. How had students landed in ninth grade when they were only reading on a third grade level? Why hadn't they ever been evaluated for services? Why hadn't they been taught to read? Clearly they were capable of learning. Their eyes were full of brightness, and their minds were open and ready. In spite of their struggling, *they still wanted to learn*. They became heroes in my eyes. For years, day after day, they had awakened and gotten dressed to come to a place where they would meet recurrent failure. And yet they didn't give up. I was at a loss as to how to help *fast enough* to keep them from dropping out of school.

And so, with personal and professional experiences combined, I began to pursue a simple idea—so simple, in fact, that I was amused at its simplicity. Join together, not with lip service but with actions—teachers, schools, parents, physi-

cians, professionals, justice workers, and communities. Combine, collaborate, communicate—educate.

Then began the challenge to make it happen. Research, studying, twenty-five hour work days and six-day work weeks, searching for funding, collaborating, networking. Falling down. Getting up. Starting again. And finally, it happened: *Plain Talk about K.I.D.S.*

The relationship between education, justice, health care, and quality of life is indisputable. The *Plain Talk about K.I.D.S.* conference provided a forum for professionals, educators, community leaders, and parents to share collaborative thought on the effective management of children with learning disorders.

Plain Talk about K.I.D.S. addressed the devastating consequences affecting children who are failing in our schools across the nation—school dropout, substance abuse, juvenile crime, social alienation, depression, and lifelong underachievement. The summit gave focus and commitment to collaborative, comprehensive, and humane management that will transform crisis into success.

Plain Talk about K.I.D.S. is meant to be a catalyst for change.

Why? One out of every five school children suffers from learning and attentional disorders that block the pathways to success in school and productive lifetime achievement. The problems faced by these youths cut across all ethnic and socioeconomic boundaries. All too frequently, these learning disorders go undiagnosed or misdiagnosed and therefore mismanaged. By the time they reach middle school, most of these children have internalized the stereotype that they are stupid, lazy, or bad. All too often, they live up to that stereotype. In fact, statistics show that over 50% of all juvenile offenders are dropouts with learning problems. Most of them suffer from misunderstood and mismanaged learning disorders. We are killing them softly with our ignorance.

We are losing our children. It has been said that if we have failed even one child, we have not done enough. Yet nationwide we continue to have over a million students dropping out every year—one million. ***Successful students do not drop out of school.***

How many could be given wings with a better educational plan? Our nation cannot afford *not* to address the issues head on. If we are to win the battle, we must join together to foster a nation that values learning and supports education.

The funding of education at the federal level is 2% of our national budget. How are we to keep the promise to our children if we do not value our children's education? How do we end this travesty? Effective education for *all* children demands that the student-teacher ratio be lowered *across the board*, and that vigorous professional development for teachers be ongoing. No more band-aids. No more lip service. It's time to put our money where our mouth is. Federal, state, and local governments must join together in making education a priority—a *true* priority—if we are to keep the promise.

The responsibility to teach these children in a way that they can learn rests with *all* of us. There are those who argue that the task is too difficult and too expensive, but to do nothing or to do little will ultimately be more difficult and more expensive. The time is now, and the responsibility is *ours*.

For a child to be lost to a fatal disease is a tragedy. For a child to be lost to our resistance to work together, our misplaced values, and our ignorance and prejudices is an atrocity. One cannot be stopped; the other can.

We must share with one another what we know. Nothing is to be gained by isolationism and "turfism." Justice, health care, education, community, and family

are all needed to work together if progress is to be made broadly rather than in isolated pockets. All must work toward the common goal of educated, successful, humane management. It is time to stop pretending not to know what we know. By understanding, respecting, and utilizing the contributions of all involved, we are less likely to harm those we are trying to help.

By design, the chapters in this book have been contributed by a diverse group of experts. Savor each chapter; each is filled with delectable insight. Then push away from the table and go to work as part of the solution to transform crisis into success.

—Alice Thomas

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The *PLAIN TALK ABOUT K.I.D.S.** summit was a true collaboration. I would like to acknowledge a group of individuals whose efforts, guidance, assistance, and support pole-vaulted the summit into reality. Many thanks to:

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CHAPTER 1

The Disabling of Labeling: A Phenomenological Approach to Understanding and Helping Children Who Have Learning Disorders

MELVIN D. LEVINE
AND CARL W. SWARTZ

The learning disorders of school-aged children are remarkably elusive and complex in their reasons and presentation in the classroom (Levine & Swartz, 1995). There are a myriad of possible patterns of dysfunction underlying deficient performance in any academic domain, maladaptive behavior, and/or negative social interaction with peers or adults. Furthermore, children and adolescents with learning disorders vary widely in their associated strengths, content affinities (positive orientations toward particular topics or subjects), and levels of motivation and resiliency. Importantly, these patterns of strengths, dysfunctions, and affinities are not captured on traditional measures of aptitude and achievement. As a result, educators, parents, and the students themselves misunderstand the nature of the learning disorder(s) and possess naive conceptions about its potential for effective management (Levine, 1994).

Consequently, the field of learning disorders is in need of a conceptual model that will accommodate and respond to the extreme heterogeneity of the students classroom teachers educate each day (Levine et al., 1993). We propose that the use of labels, such as learning disabilities, or attempts to fit children with learning disorders into a few syndromes represents an oversimplification of poor performance in the classroom. The following outcomes may result from such limited orientations to learning disorders. First, the results of standardized testing can be potentially misleading because either students fit narrow diagnostic criteria or they do not. Second, the results are unlikely to capture the essence of the wide range of learning disorders, strengths, and affinities. Finally, the results may not contribute to defining the true needs of all individuals who need classroom accommodations or direct interventions. Far too many students will fall between the cracks between recognition, assessment, and/or proper management. Instead

of labels or a set of syndromes, we propose students will benefit from the use of well informed descriptions, or profiles, of a student's areas of weakness, strength, affinity, and preferred styles of learning and working as being far more likely to be authentic, redemptive, and helpful.

In this introductory chapter, we will explore a phenomenological approach to recognizing and managing students with learning disorders. The proposed phenomenological approach is an alternative to a syndrome orientation to learning disorders (see Levine et al., 1993; Levine & Swartz, 1995). First, there will be consideration of some basic ingredients of effective description. Then we will use written output difficulties in middle school as a prototype for this approach, following which we will examine its implications for assessment and effective management.

Exploring the Model

Guided observation by and meaningful communication among all people concerned with the education of students with learning disorders originates with classroom teachers who identify neurodevelopmental functions that are needed for the mastery of academic subskills (i.e. attention, memory, language, etc.) (Swartz, Levine, Reed, Brown, & Wasileski, under review). These neurodevelopmental functions represent a range of highly specific and basic cognitive developmental abilities that may or may not be adequate to satisfy the current academic and social expectations imposed upon a child. An individual's neurodevelopmental function is likely to contribute to learning across a range of performance areas. For example, the ability to retain sequences of data in short-term memory is a neurodevelopmental function that plays a role in following directions, acquiring procedural knowledge in mathematics, and remembering a person's telephone number. Thus, short-term memory is a function that participates in a range of tasks. If a neurodevelopmental function represents a weakness (and therefore constitutes a neurodevelopmental dysfunction) for an individual, it is apt to interfere with the performance of tasks that require it (unless some alternative strength, bypass strategy, and/or intervention can be mobilized).

Neurodevelopmental functions are especially critical to academic success as they collaborate to enable a student to master and apply subskills with increasing sophistication and automatization. The latter are the critical subcomponents of academic skills. For example, the neurodevelopmental status of a student's phonological abilities and awareness is closely tied to their word decoding skills: a critical subskill of overall competency in reading (Olson, Forsberg, Wise, & Rack, 1994; Perfetti & Curtis, 1986; Vellutino, Scanlon, & Tanzman, 1994). Neurodevelopmental functions are not only confined to playing a role in subskill attainment; they are also critical for the comprehension, retention, and application of knowledge, in general. In this chapter, however, we will limit our discussion to skill development.

Neurodevelopmental functions, for the most part, gain in their sophisticated use as children use them through their school years (Levine, 1994; de Kruif et al., 1995). Not only do they contribute to the acquisition of academic subskills but they themselves undergo enhancement and refinement as the subskills they contribute to are deployed. For example, strong semantic abilities, or knowledge of

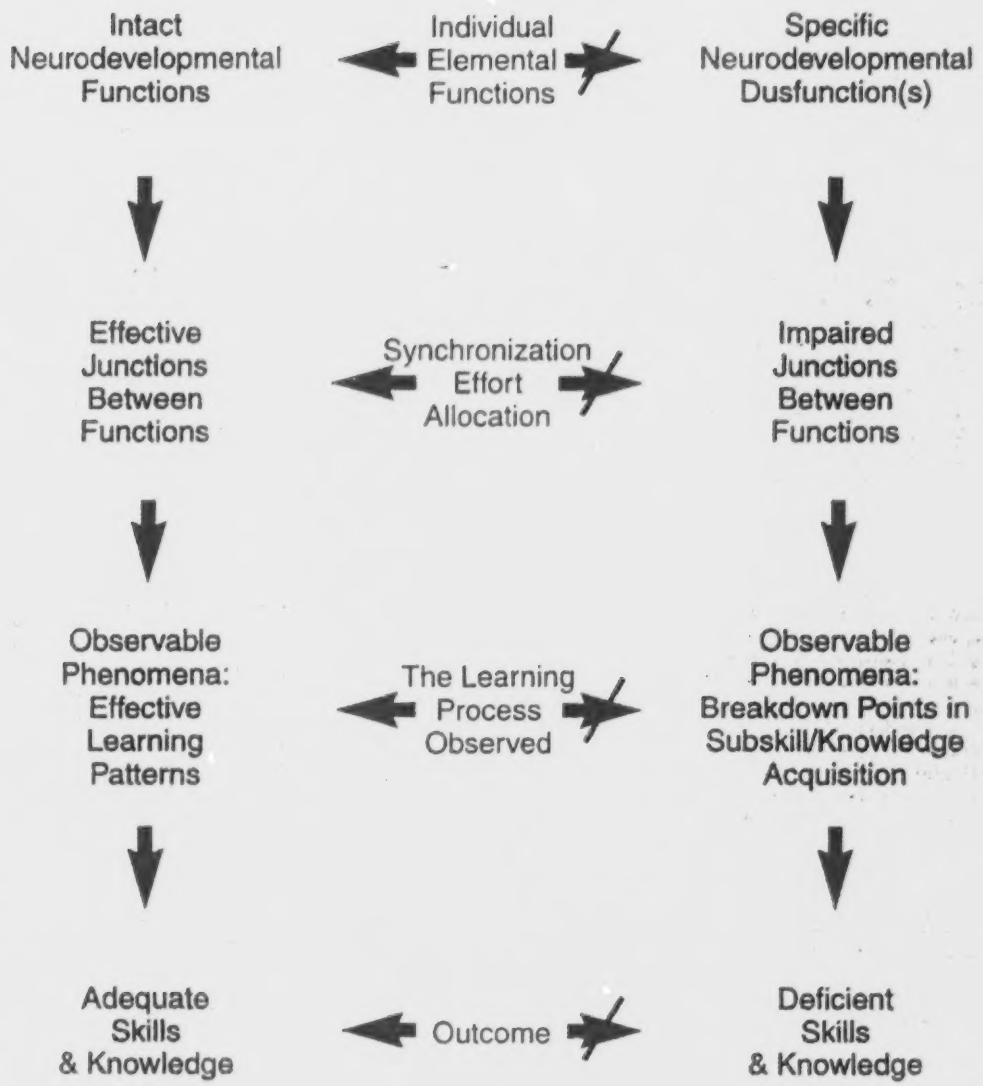

FIGURE 1
This diagram depicts two pathways. On the left is seen a model of the normal acquisition of subskills, while on the right specific breakdowns and their association with observable phenomena are described.

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word meanings, facilitates the attainment of certain reading subskills, while reading, in turn, greatly strengthens a student's capacity to appreciate word meanings.

There are no important academic subskills and skills that draw upon only a single neurodevelopmental function. In fact, there is a constant demand for dynamic collaboration among multiple neurodevelopmental functions. Consequently, a phenomenological model of positive school performance posits the following: (a) discrete neurodevelopmental functions need not only be intact or strong, but they also must be capable of efficient interactions and compatibilities among each other (attention with short-term memory), (b) as well as their interaction with specific academic domains, such as biology or Spanish. These relationships among functions and between functions and content demand synchronization and reasonable sharing of mental effort. Thus, to contribute effectively to the mastery and subsequent application of a *subskill*, a neurodevelopmental function must be able to operate at a *rate* synchronized with that of other participating functions, and it must perform without exhausting more than its share of a student's *effort resources*. When inordinate effort is drained to fuel a particular neurodevelopmental function, the other participating neurodevelopmental functions are likely to be deprived of their needed *attentional resource* and *energy allocation* resulting often in a generalized delay in acquiring or using the desired skill.

Any academic pursuit can undergo *expectations analysis*, a process whereby a specific task, a specific subskill, or even a subject area at a particular grade level can be parsed into the neurodevelopmental functions that must be intact and interactive to engender success. When a student is having difficulty, it is therefore important to begin the diagnostic process by posing the following questions, "Where is the breakdown occurring?" and "Which of the neurodevelopmental functions required to learn and apply this subskill are weak or unable to assume their share or play their vital roles?" Thus, a child may harbor a neurodevelopmental dysfunction in a particular function and/or there may exist a dysfunction at the junctions between functions. In either case, the breakdown prevents the student from succeeding.

Neurodevelopmental dysfunctions can stem from a number of possible causes. It is not the case that all dysfunctions derive from neurologically based problems. However, neurodevelopmental functions are always critical mediators of performance. A neurodevelopmental dysfunction may exist because of a lack of sufficient use of that function, because of cultural influences, because of inadequate or ineffective teaching in the past, or, in fact, as a result of genetic or acquired central nervous system lesions. As we have noted, academic success can actually enhance the very neurodevelopmental functions that contributed to the positive academic outcome. Similarly, a lack of academic success can inhibit the growth of a neurodevelopmental function (the Matthew Effect, see Stanovich, 1986). If a child does not read very much because of a memory dysfunction, some gaps in language ability may become apparent during adolescence.

Academic skills such as reading ability can be subdivided into a series of subskills such as decoding, comprehension, reading rate, and reading retention. In examining the role of specific neurodevelopmental functions during learning, it is most germane to study their interactions in the development of the subskills, the critical components that converge to form skills. In doing so, it is possible to identify a series of common observable phenomena that can be detected when students at particular grade levels are having problems mastering discrete subskills

(Levine, 1994). For example, one observable phenomenon that may result from a dysfunction between phonological abilities and active working memory is a student's inability to maintain in memory the multiple sounds within a word while trying to read that word aloud. An informed observer would discover that by the time the child articulates the last of three sounds, she has forgotten the first one and so cannot reblend the sounds to form a whole word. This neurodevelopmental dysfunction at the junction between the functions of phonology and active working memory may undermine the acquisition of the subskill of decoding for reading which, in turn, will deter the attainment of overall skill in reading.

Written Output as a Prototype

As children progress through school, there is a growing requirement for productivity on paper (Levine, Oberklaid, & Meltzer, 1981). In particular, students need to convey their knowledge and creativity through writing, using this medium for creative pursuits, interpretations, summaries, and a variety of problem solving activities (Hooper et al., 1994). During middle childhood (ages 11–14), writing emerges as one of the more daunting parts of the curriculum, and many students with underlying neurodevelopmental dysfunctions are especially prone to deficiencies in one or more of the subskills of written output. Specifically, recent empirical research results that used a multivariate approach to investigate writing suggested that students with dysfunctions of active working memory and expressive language (sentence level) combine to result in written narratives with high rates of spelling errors and poor syntax and semantics (de Kruif et al., 1995). Other research supports the notion that active working memory combines with linguistic abilities during students production of written text in the primary grades, whereas higher order abilities (i.e., metacognition about writing) contribute to written expression during middle grades (see Berninger & Swanson, 1994; Swanson & Berninger, 1994). Thus, written output can be used as one prototype to illustrate a phenomenological approach to understanding the interaction between neurodevelopmental functions and academic skills.

Writing Subskills and their Analysis

Our model of writing posits six major subskills that comprise written output (see Table 1). The individual written output subskills can be analyzed further into their requisite neurodevelopmental functions and potential dysfunctions.

These subskills of writing are described below:

- *LETTER FORMATION*—Accurate and rapid letter formation requires good graphomotor function and the capacity to mobilize and coordinate muscle groups so that they can record the symbols on paper. The requisite neurodevelopmental functions include: previsualization which is the ability to picture a letter before and while forming it (i.e., knowing what it looks like), motor sequential memory recall of the order of muscle movements needed to form each letter, motor production ability to assign muscles specific roles

TABLE 1
Six Major Writing Subskills

Subskill	*Attainment*
Letter Formation	Legibility, speed, automaticity
Spelling	Accurate written spelling
Mechanics	Adequate punctuation, capitalization, paragraphing
Written Language	Effective verbal encoding of thoughts
Organization	Appropriate time and material management in preparing writing
Ideation	Topic selection, creativity, organization of thoughts, analytic/conceptual abilities

during writing, and sensory/motor feedback knowledge of precise muscle locations during writing.

- *SPELLING*—Accurate spelling demands keen phonological awareness, an accurate appreciation of language sounds, good visual recall of the overall appearance of words, an awareness of English spelling rules, regularities and irregularities, and the capacity to preserve large chunks of data, i.e., long multisyllabic words.
- *MECHANICS*—The ability to understand, recall, and apply rules of punctuation and capitalization is key to the use of mechanics in writing. This ability depends, in part, upon several neurodevelopmental functions, including memory for rules, visual recognition of what looks right, syntax processing, and an overall sense of how language works metalinguistics.
- *WRITTEN LANGUAGE*—Good written language is dependent upon good spoken language. Consequently, the neurodevelopmental functions that comprise spoken language ability pertain to written language as well. Phonological awareness, semantic functions, syntactical abilities, sentence formulation skill and use of grammar, and discourse competency expression that goes beyond single sentences all play a role.
- *ORGANIZATION*—Writing is a formidable challenge to the organizational skills of a student in middle childhood. Material-spatial and temporal-sequential organization are necessary to prepare written products with reasonable efficiency and care. Organization is highly dependent upon the neurodevelopmental functions of attention, which contribute to the planning, mental energy, concentration, self-monitoring, and pacing of functions during writing. This role of attention is sometimes subsumed under the production controls or executive functions of the brain.
- *IDEATION*—The ability to generate thoughts for writing or while writing is another critical dimension. Various conceptual functions are critical. These include an awareness of the metacognition of writing (an understanding of what is actually involved in the writing process). The sequencing of thoughts, brainstorming abilities, elaboration skills, and creativity all can play essential roles in various forms of writing.

Observable Phenomena and Breakdown Points in Writing

A range of potential breakdown points can seriously impede the acquisition and use of writing subskills during middle childhood. Virtually any pattern of breakdowns in the above neurodevelopmental functions and their junctions can and does occur. Some examples should illustrate this:

Example 1

A twelve-year-old boy has many good ideas and well developed language abilities. In class discussions he reveals a slight articulation problem, but expresses himself very well. However, he is reluctant to submit written assignments. When he does so, his ideas on paper are not at all sophisticated, and the language content is equally simple—more like that of a seven-year-old. His writing is slow and labored. Legibility is poor. He employs a right-handed, distal, and tight pencil grip that is extremely forceful. He is good at spelling and understands rules of punctuation, but he commits numerous spelling and punctuation errors when he writes. He is succeeding in mathematics, and he reads well.

This child may well be experiencing significant graphomotor dysfunction. His tight pencil grip and labored output is likely to be the result of difficulty with graphomotor production, a problem affecting a student's ability to assign and coordinate muscle groups in the hand during letter formation. Many of these children also manifest speech problems. Frequently, as in this case, the great motor effort required for writing undermines other functions (such as omitted or misspelled words). Students like this often feel self-conscious about writing and may be unwilling to submit their written products.

Example 2

A thirteen-year-old girl has serious problems with spelling. She tends to start and end words reasonably accurately, but often the middle portions of words are either omitted or misspelled. Her sentences are compromised of omissions of words. Her writing is quite legible, and her basic ideas and language usage are good. However, she sometimes loses track of ideational flow and goes off on a tangent. In mathematics she becomes overwhelmed when faced with multistep procedures. On psychological and educational testing, she has been unsuccessful on tasks that required her to retain sequences of data in order, while she has exhibited strengths in perceiving and remembering complex gestalts or designs.

This child evidently has problems with the preservation of linear chunks of data. It is hard for her to appreciate and retain inner detail for spelling, writing, and mathematics, but when information is arranged in a configuration or design, she is able to deal with it effectively. Students like this often have increasing difficulty through middle childhood, as the length and complexity of linear arrays of data and various procedures become increasingly challenging.

Example 3

An eleven-year-old boy has had a long history of attentional difficulty. He has shown evidence of distractibility, impulsivity, mental fatigue, and weak self-monitoring. Writing has always been a serious problem. Although he is a very bright and competent boy in other areas of education, his renditions on paper are totally unsophisticated and laden with careless mistakes in spelling and mechanics. The boy claims that he hates to write, and that is what makes him hate school in general. He recently said, "Whenever I try to write, my whole mind goes dumb on me." His parents report that getting him to do homework requires relentless coercion and causes serious disruptions in home life.

Many children with attention deficits have serious problems with writing. When they try to write, they may/can experience overwhelming mental fatigue. Additionally, they have trouble coordinating and synchronizing the multiple developmental functions needed for writing. Their difficulties with planning, filtering out distractions, and self-monitoring represent additional writing barriers. In particular, these students have trouble managing the junctions between the functions. It is hard for them to orchestrate the interactions between memory, language, ideation, and motor function. For example, the flow of ideas may be too rapid for their fingers to keep pace. In children with attention deficits, it is also important to look for additional neurodevelopmental dysfunctions such as problems with retrieval memory or language complicating the underlying attentional dysfunction.

Example 4

A fourteen-year-old girl receives poor grades on reports and tests that require significant writing. Her writing is barely legible, and her spelling is often inaccurate. Her spelling errors are most often phonetically correct, e.g., brawt for brought. She much prefers manuscript to cursive writing. She shows strengths in her reading comprehension and seems to have no difficulty following directions and processing complex explanations and concepts across subject areas. However, her teachers have noted her great difficulty expressing herself during discussions. She is nonelaborative, hesitant, and slow to respond. She has commented that it is hard for her to find the right words to fit her ideas. As a preschool child she was slow to speak intelligibly in complete sentences.

This student may be contending with two areas of dysfunction. First, her phonetic spelling and reluctance to write in cursive may well reflect underlying problems with visual recall revitalization. Affected students tend to spell phonetically because they have problems picturing in their minds the visual configurations of the words. They commonly prefer printing to cursive writing, since the latter confronts them with more complex configurations to retrieve. This girl also appears to have problems with language production that are further thwarting the development of effective writing skills.

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In the examples cited above, each student exhibits some observable phenomena that suggest the presence of one or more neurodevelopmental dysfunctions impeding writing. In such cases it is important to verify the presence of the neurodevelopmental dysfunctions while also trying to uncover other relevant areas of weakness as well as associated strengths. This justifies a collaborative and multifaceted approach to assessment.

Implications for Assessment

The valid assessment of a child's profile of neurodevelopmental strengths and dysfunctions is a critical step in devising an effective plan for her or his management at home and in school. The following general principles can guide the assessment process:

- Clinicians and teachers need to be cognizant of the common observable phenomena that thwart the acquisition of particular subskills at specific grade levels. They also need to be receptive to the possibility of encountering some unusual or even unique phenomena in individuals.
- Any assessment process should stress the search for strengths and content affinities, i.e., strong intellectual orientations toward certain subject matter.
- Multiple forms and sources of assessment information should be gathered. Evidence should derive from direct observations by teachers and parents, interviews with the child, careful analyses of work samples, as well as formal testing procedures. The choice of tests is not nearly as important as the kinds of observations and inferences that occur during the testing.
- The assessment process should consist of the search for recurring themes. That is, it is important to seek patterns that are evident in the observations and/or tests of more than one individual and across time. For example, a particular form of memory dysfunction may be suspected on samples of spelling, math work, comments by the parents, and some direct tests of memory function. For a particular finding to be considered valid it should be verified. Any single observation, any one source of data should be considered incomplete and unready for interpretation until and unless it is compatible with other forms of evidence.
- Depending upon the complexity of individual cases, different forms of assessment are likely to be appropriate. Four levels of assessment intensity can be defined as follows:
  a. informed observation and discussion by parents and teachers;
  b. the above, plus evaluation by a professional (e.g., psychologist, educational diagnostician, or developmental pediatrician);
  c. evaluation by a multidisciplinary team within the school;
  d. evaluation by an independent evaluation team in the community.

  The report of an assessment should consist of an accurate description of a child, one that extends well beyond the invocation of labels and the reporting of test scores. If the latter are a necessity to qualify for services or facilitate reimbursement, they should be regarded as necessary evils and not as the end point of evaluation! As noted previously, a description should include an account of neurodevelopmental strengths and dysfunctions, relevant observable phenomena, current skills and subskills, and content affinities. When

deemed significant in individual cases, evaluations also should yield information regarding emotional, motivational, environmental, family, and health factors.

Description can lead logically to prescription. An accurate profile of strengths and weaknesses is replete with implications for helping a child overcome the effects of his or her learning disorder.

Implications for Management

The successful management of a child with a learning disorder requires a multifaceted, coordinated approach. The parents, teachers, and any involved clinicians must share goals and make use of strategies that are truly complementary. In working together, all must recognize the need to manage an entire profile of strengths, weaknesses, and affinities rather than just an attention deficit or language problem in isolation. That means that management has to be highly individualized, custom fitted to students unique needs. The following are the components of effective management:

- DEMYSTIFICATION—It is often futile to try to motivate a student to work on a problem he does not understand. Therefore, the education of a student about the nature of the learning disorder as well as associated strengths is a critical component of management. A clinician or teacher should explain the profile to the child using accessible language, multiple examples, and, when appropriate, vivid analogies. The demystification should be upbeat and nonaccusatory. It should not sound like a sermon or an admonition. Techniques and examples of demystification are described elsewhere (see Levine, 1994).
- BYPASS STRATEGIES—In order to help a child keep pace with the flow of expectations, certain strategies may need to be devised to enable her to circumvent any breakdown points that are impeding subskill learning or application. Such bypass strategies include modifications in the rate, or complexity of information being conveyed to the student or accommodations in what that student is being asked to produce. In the case of a student with graphomotor dysfunction (Example 1), it would be helpful to allow more time for writing, permit the student to write shorter reports, arrange for some reports to be given orally rather than on paper, and encourage the use of a word processor. While none of these accommodations actually cures the graphomotor dysfunction, they represent important bypass techniques that can prevent the student from being discouraged and ceasing to be productive in school.
- INTERVENTION AT THE BREAKDOWN POINTS—A wide range of techniques can be applied to enhance deficient subskills. These include:
  a. exercises to automatize (render fast and effortless) slow and labored writing. Vigorous practice with letter formation or the recall of spelling are examples.
  b. the scaffolding of tasks. This entails the provision of a facilitating framework. A child with expressive language problems as in Example 4 might benefit from being given a list of key vocabulary words and important

terms to use in the order given in her report, with each vocabulary word or term to be applied in a separate paragraph. This scaffolding allows her to build upon the provided language rather than having to generate an entire narrative or exposition from scratch.

c. the design of activities that end at the breakdown point. In Example 2 the child would be given words and sentences with internal portions missing and asked to supply the omitted material (cloze procedures).

d. the organization of tasks into stages and the accentuation of the breakdown point as a separate stage. In Example 3 where the student has attention deficits, proofreading for careless errors would constitute a separate stage, and in Example 4 where the girl has language production difficulties, the elaboration of ideas into a tape recorder would become a separate stage during writing.

Other interventions at the breakdown points involve modeling a task for a child, providing strategies, and using strong neurodevelopmental functions to help support weaker ones. An instance of the latter would be the use of graphic designs to help the child in Example 3 use her spatial abilities to overcome the effects of her problems with linear and sequential data formats and multiple step procedures.

- THE STRENGTHENING OF STRENGTHS AND AFFINITIES—Any management should include provision for the growth and development of a child's areas of competency. Ultimately, the strength of a child's strengths is likely to have the greatest implications for success and gratification during adult life. Opportunities must be sought at home and in school for children to apply, exhibit, and practice what they are good at and that for which they display a true inclination.
- OTHER FORMS OF INTERVENTION AND SERVICE—A range of additional options for management exists, although their availability varies from community to community. These include targeted tutoring outside of school, specific forms of developmental therapy such as language or occupational therapy, psychological counseling, and structured group activities including social skills training. In some cases children may be helped by taking medication. Psychopharmacological management may be necessary to strengthen attention, reduce anxiety or emotional liability, or control maladaptive behaviors. While potentially valuable, it is important to recognize that drugs are never the whole answer; they deal only with one segment of a child's overall profile and therefore should be considered only a part of an overall management plan. Thus, in Example 3 where the boy has writing and attentional problems, medication may be beneficial, but by itself is most unlikely to transform this student into a competent writer.
- HUMILIATION PROTECTION—Every effort should be made to shield a child with a learning disorder from public embarrassment particularly in front of peers. Teachers, in particular, must avoid the temptation to be openly critical or to put children in a position where their shortcomings are displayed publicly. Students with writing difficulties, such as those exemplified in this chapter, should not have other children correcting their papers, and their written products (when messy) should not be displayed. Writing problems can be especially damaging during middle childhood, a time when students are maximally self-conscious and sensitive about appearances.

Recurring humiliation in school is likely to result in serious emotional and motivational complications that are far more dangerous than any learning disorder itself.

Phenomenological Versus Categorical Models

In this chapter we have portrayed and exemplified a phenomenological approach to learning disorders during childhood. We have explored its implications and some of its applications. In particular, we have emphasized the vital importance of specificity. Thus, rather than feeling comfortable with the notion that a "child has dysgraphia," we explore and describe the neurodevelopmental functions that are not operating and interacting optimally to produce the needed subskills for writing. We then base our understandings and our interventions upon such rich description. If we adopt this approach, we lose the undeniable convenience of the labels as we gain in our likelihood of customizing management to the needs of individuals. Table 2 summarizes the features of these two models.

TABLE 2
Phenomenological and Categorical Models: Some Comparisons

Phenomenological Model	*Categorical Model*
Calls for more highly individualized management programs	Tends toward more uniform curricula and other interventions
Fosters greater personal insight on the part of the child and relevant adults	Leads to more general notion of a problem
May make it more difficult to obtain funding for services	Facilitates funding and reimbursement
Might be more difficult to form the basis for advocacy groups	Is easier to perceive as a "cause" for advocacy groups
Could lead to a more amorphous, less defined area of morbidity around which to develop policy	Is more readily recognized as a problem by policymakers
Tends to identify more children as needing careful management	Is a better "gatekeeper," identifying fewer children
Makes research much more difficult by accentuating the heterogeneity of children with learning disorders	Simplifies research by implying that the categories are relatively uniform
Has implications for the teaching and care of all children	Isolates a subgroup as clearly abnormal
Emphasizes the search for recurring patterns of function and dysfunction	Often accepts single source of data for diagnosis (e.g., eligibility formula)
Avoids the labeling of children	Relies upon labels for children
Gives less emphasis to testing and scoring, more to observation and description	Stresses tests, test scores, and specific cut-off points
Places equal emphasis on strengths, dysfunctions, and affinities	Uses a strictly deficit/pathological model

It should be evident that there are trade-offs when one adheres to a phenomenological approach to children's learning disorders (see Table 2). Categories, labels, and gold standard test scores are certainly more tidy than phenomena. They make it easier to derive uniform practices and policies for children in groups. Yet, in this chapter we have portrayed an approach that is more individualized and less convenient for research, but, in all likelihood, more applicable to the realities of human diversity. In the future it may be possible to reach an accommodation whereby a phenomenological approach can lend itself to rigorous research, feasible policy, and the cost-effective management of diverse children with learning disorders while steadfastly preserving its intrinsically humanistic ethic.

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CHAPTER 2

The Emotional Experience of Learning

EDWARD M. HALLOWELL

I feel very lucky to be a speaker here today. We are in a great city, a city that for me teems with memories. I spent four years here at Tulane Medical School, and as taxing as medical school was, I loved my time at Tulane. Hardly a day passes, even now, that some image from those years doesn't flicker through my brain's kinescope. I did everything here from dissecting a cadaver to falling in love. My father died when I was in medical school here, and I'll never forget opening the letter from him, and reading it in the medical school library: "Dear Ned, I have lung cancer. . . ." Six weeks later he was dead. On the other hand, I delivered 36 babies that same year, one steamy August in 1977. I learned how to read EKG's here, a skill I've long since forgotten, and I learned how to suture in the Charity ER, sewing up amiable patients who had self-anesthetized prior to arrival. I learned how to pronounce a person dead in this city. I got drunk in this city, more than once. I ate food in this city, such food as I had never before and have never since eaten on a regular basis.

In this city of the basics of life, I learned the basics of a profession I'm still a member of, the medical profession. I started a trip down the gullet of humanity every doctor stays on for the rest of his or her life. Life is never the same for anyone after they graduate from medical school. You see too much, more than anyone really ought to see, more than anyone can sensibly account for, given our human abilities. I took the voyage through Charity Hospital, and I saw the living and the dead in states that forever changed me. I imagine it is like having been to war. Most doctors don't tell you what they've seen of life. They pontificate instead, or they get hot and bothered about malpractice or insurance companies or overbooked schedules. But most doctors are a little burned by what they've seen, a little chastened, a little stunned. Most doctors, in their quiet moments, when they look at what they've seen, feel a little desperate, as if hard-pressed to tell you what it all means, and glad you don't ask. It's as if our work exposes us to all the data, but none of the formulas or interpretations to make sense of all that data. Few of us know quite what to do with it (the knowledge of death and life we get), and it sets us apart. I got set apart when I came down here. I lost my innocence here, and I gained more knowledge than I've ever been able to make sense of.

We are here this week to give some meaning, some interpretations and formulations, some means of making sense of the vast array of data we have seen in the field of how people learn. It is not as bloody, this data, as what I saw at Charity Hospital, at least not as obviously bloody, but it is just as heartfelt. And what is so wonderful is that we now have more tools than ever to begin to make sense of what we've been seeing.

I feel lucky to come back, not only to stir those humid memories of my own poignant years of initiation, but also to share this platform with people I admire and speak on a topic I cherish. It happens once in a while that you get the chance to talk about something you really want to talk about. Like many dangers, this is a delicious danger. To talk about something you really want to talk about means you can plow right into what is (for you) interesting territory. But, the danger is, what if what is interesting to you is less than interesting to others? What if your audience should look back at you, as my cat so often looks back at me, and indifferently yawn, before stretching out, in the midst of my frenzy, to take a nap? I'm used to it from Louie, my cat, but the job these days is to try to see to it that the world at large does not stretch out in indifference to learning problems as it has in the past.

Even that endeavor can be dicey. Not long ago I quoted St. Paul in a lecture I gave and was roundly chastised afterward by a person who found the mention of St. Paul offensive. I am somewhat used to this sort of experience, too, working in Cambridge, Massachusetts, as I do, where it seems the only religion one can mention publicly without fear of anyone's taking offense is the religion of recycling. We live in divided, disconnected times where the ratio of anger to goodwill is approaching infinity, and the ability of people to laugh at themselves has gone into precipitous decline. Saints preserve us (if I may safely mention saints) from the day when we forget how fundamentally fallible—and funny—each of us truly is.

What is funny about us all is my central message today. If you're taking notes and you want to know what Hallowell has to say, this is it in a soupspoon: we're all a bunch of nuts. We're all crazy, disabled, disordered, fallible, crippled, vulnerable, unreliable, selfish, petty, insecure, disturbed creatures of the highest order. Not a one of us deserves the ground under our feet or the sky above our heads or the time of day we've been given. That is my take-home point, the question I would put on the exam. What is it we all have in common? We're all foolish, in one way or another. I hope with this point I can clear your palates for the rest of this conference. We must share the deepest sense of humility—and—humor before the gargantuan proportions of our common ignorance and imperfection. Only if we begin with that attitude, is it fair for us to speak of other people's disabilities and disorders.

I am reminded of the story of the woman who goes to her priest to ask for forgiveness for having hurt another member of her village by spreading gossip based on wrong information. The priest listened to her story and told her for penance she should go home and take a pillow, cut it open, and leave it on her front porch, then return to the priest. The woman thought this was simple enough penance, and so she did it. When she came back to the priest she told him she had ripped open a down pillow and left it on her porch as she had been instructed to do. "Good," the priest responded. "Now, the second part of your penance is to go find and pick up every feather that has blown away."

Think of all the feathers that have blown away in the name of stupidity. Think of all the children and adults who do not learn easily who have been called stupid, lazy, or bad. How many of us—and I daresay it is all of us—have gossiped

about a friend or colleague, calling him or her "slow" or "dealing with less than a full deck of cards" or simply "stupid" without any true knowledge of what that person's struggle to learn was actually all about. In my own case I use a glib phrase I picked up during my internship at a Harvard teaching hospital (Harvard is famous for this sort of phrase). Now when I want to put someone down for not being very smart, I say that so-and-so is "no threat to Spinoza." It usually brings a laugh, and it gives me the satisfaction of having made others laugh as well as asserting my own intellect above that of the fellow I have just summarily dismissed.

Of course, should anyone say that about me, as I'm sure people have, I would be crushed. Perhaps no insult is more intimately demeaning than the insult upon one's intellectual capabilities. Sexual prowess may crowd the ranking, but for most people it is their intellect that is most vulnerable. What makes the experience of learning difficulties most painful is not the problem in learning per se, but the shame that so perniciously and frequently enshrouds it.

When I was a student at Phillips Exeter Academy, a prep school in New Hampshire and another place where one learned to be quick with a gibe, I was told by a teacher there was no such thing as a learning disability, there was only stupidity and laziness. That teacher spoke for generations.

But now, thanks to the work of people like Howard Gardner, who has taught us that there are many different kinds of intelligence and that the concept of stupidity is itself a stupid one, and thanks to many other people's work, people like Priscilla Vail, who has cast her wise warmth over the tundras of what used to be the frigid plain of special education and Mel Levine, an innovative goose if ever there were one, who has put the stamp of brilliance, if not downright panache, on an area medical doctors never used to touch, we live in warmer climes and more enlightened times.

In a rethinking of human potential, we should no longer invoke the model of life as a race, where the swift shall win the prize, but rather the model of life as a garden, where each flower should be given the chance to grow and blossom to the fullest. If we protect the garden and the sun continues to shine and the rain to fall, all today's little shoots should flower one day. It is a diverse garden we tend. We do not expect a rose to be a lily or a lilly to be a rose. Neither should we expect our children to be what they're not, or to grow faster than they can. I do believe our children are like flowers. If you take away the weeds and remove the stones, and if you provide food and light and water, the flower will grow.

Sadly, the general public still does not know what most people in the field of education know. The general public still believes in the cruel dichotomy of smart and stupid, even though the average person has been unfairly penalized by that specious dichotomy time and again. All of us here have known brilliant athletes or dancers who grew up feeling third rate because they couldn't do math. We have all known children who had great people skills, but who suffered by being called slow. We have probably all had the evaluative finger pointed at us at one time or another, and suffered under it, but without protest, because we automatically subscribed to its authority. We have all seen that finger point derisively at us, at our friends, at colleagues or loved ones in the name of intellectual standards. It is time that that finger be amputated, or at least turned back upon itself. It is time that teaching by humiliation be called what it is—sadism—and education cease to be the emotional ordeal it has been for so many. It is time that all schools recognize that learning begins in emotion, what Priscilla Vail calls the "on-off switch for

learning," and that the teacher's first job is to create a positive emotional envelope. The ancients knew this well. The Latin poet, Horace, said that the poet would always be a superior teacher to the philosopher because the poet could teach by pleasing. To instruct by pleasing, that is what the great teacher does. If Horace knew it, we should catch on, too, some 20 centuries later.

We must begin by recognizing that we do not all learn the same. Most of us by now have heard of some basic learning styles. Some of us are auditory learners. Some of us are visual learners. And some of us are kinesthetic learners, learning best by taking things apart. My two-and-a-half-year-old son, Jack, falls into that category most of the time.

But we're all individualistic. Our categories are crude, and they cannot possibly begin to subsume the variety of the human brain. We all have strange brains. If only we knew how strange. None of us is without peculiarities. Our brains lead us all in diverse directions. When you lift up the veils of our cerebrums, there's no telling what you'll find.

For example, do you know that I love, dearly love, to watch candlepin bowling on TV? For those of you who do not know, candlepin bowling is a form of bowling found almost exclusively in the Northeastern United States. It is a devilishly difficult sport due to the narrowness of the pins and the small size of the balls. The balls are only about the size of a grapefruit, and it is extremely difficult to hit the pocket squarely enough to make all ten candlepins fall down at once, that is to roll a strike. Even making a spare, or getting all the pins down with two balls, is tough. Even though the bowler gets to roll three balls per frame instead of two, as in tenpins, the average score for an expert candlepin bowler is around 120, and no one has ever rolled a 300 perfect game, nor is anyone ever going to.

Ever since I was a little boy on Cape Cod and my uncle ran a candlepin bowling alley, I have loved the locally-produced, longest-running show in Boston called, straight-forwardly enough, "Candlepin Bowling." It comes on TV every Saturday at noon, unless a football game moves it to an earlier time. I see patients on Saturday, so I almost never get to watch candlepin bowling anymore. It is a sad loss for me, but a loss that none of my friends, and certainly not my wife, has any sympathy for whatsoever.

I have many other odd habits. I have been known to eat corned beef hash cold out of a can while watching quiz shows on late night TV. Mindless TV relaxes me tremendously. I enjoy people who are politically incorrect. I almost always side with the underdog. I like people who say foolish things.

I am telling you all this not to begin a true confession, but to introduce you to the world of learning disorders, as I see them. Many people might think it evidence of an as-yet unnamed learning disorder that I like to watch candlepin bowling on TV on a Saturday afternoon or eat corned beef hash cold out of a can. Certainly my wife does.

But you know what? And this is why I love this field so much. You know what? We're all like that! We all have our secret equivalents of liking to watch candlepin bowling. We all have our peculiarities, thank goodness. Particularly in America, a country founded by nonconformists, we are all, secretly or openly, marginal in some way. We all live outside, in some secret ways, what my old history teacher, Henry Bedford, used to call the behavioral perimeter of regular society. We're all a little bit weird, thank God.

And we all learn differently, too. We all have a learning disorder of our own.

No one learns as the water flows, downhill all the time. No, most of us learn uphill, most of the time. Even the brightest among us have suffered in learning a new skill. If you want to see real pain, watch an adult of my generation or older try to get computer-literate, It's pathetic. I know; I've been at it for years. When I learn a little bit of what my computer can do, I stick with that, afraid to risk learning more, to tiptoe into ignorance. It is like knowing one way to get to Topeka. If a friend tells you a new way that could save you many hours, people like me stick with the old way. That's probably the most common learning disorder: fear.

Our nosologists have named some other disorders of learning. We have named dyslexia, and we have named nonverbal learning disability, and we have named Asperger's syndrome. In the next decade I'll bet we'll have named a lot more and devised better ways of testing for them, too. But before we get too busy naming—and it is a wonderfully good turn of events that we are naming instead of resting content with smart and stupid—we might reflect that there's more within the brain than we can dream of in our catalogue of disorders. That we learn at all is a miracle. That the 100 billion neurons we have upstairs work together to produce coherent, new ideas is pretty awesome, as they say on the playground. And we are only just beginning to describe the wonders of the brain and what it means to learn. It is as if we have just discovered the jungle, and we have coined the names leaf, tree, vine, and river. Before we start congratulating ourselves on what an advanced concept vine is, and how clever it was of us to extrapolate beyond leaf to reach vine (an entwination of leaves and their appendages), let's remember we're far from sophisticated yet.

But as we look at learning what can we say? Ask most kids or medical students—people who are actively engaged in rapid-fire learning—and many of them will tell you learning is a disorder of the worst sort. What an awful thing to do, to learn. Why would anyone want to do it? Why would anyone want to twist their brain to take in something new? Learning hurts. Experience, the greatest teacher, teaches us most often by hurting us.

When I was a little boy I was at a picnic one day on what we called the outside beach, the beach that protected Pleasant Bay in Chatham from the ocean outside. After we cooked our hot dogs and hamburgers, my uncle overturned the grill into the sand. Before he went down to the shore to get some water to put on the still-hot coals, he warned me, "Neddy, don't step on those coals. They don't look hot because they're just sitting in the sand, but they're still hot as can be." I watched him walk down to the shore, and I looked at the coals. He was right. They sure didn't look hot. They looked as gray as the sand. How could they be hot? I wondered to myself. They've cooked all those hot dogs and hamburgers, and now they're lying in the sand, looking cool and gray. Then, guided by some impulse from beyond, the same impulse no doubt that has led man into temptation since God created us all, the same impulse that has led us all to do what we have been warned not to do, the same impulse that leads us to do what we've been told we shouldn't, that impulse took my foot and planted it on top of the coals.

I howled. My uncle was right. The coals were still hot, as hot as they could be if you were to ask me. But I had to find out for myself. I had to learn. And the learning hurt.

Did I have a learning disorder because I disregarded the warning of my uncle? I suppose I did. I had the same learning disorder that afflicts us all at our

worst moments, but also at our best. If it weren't for that learning disorder we'd all still think the world was flat because our teacher would have told us so, and that would have been enough for us.

But, you're wondering, how can I mean that we all have a learning disorder? What am I saying?

I am saying, and I wish I could sing it, that we learning disordered folks are not so different after all. We differ in degree, but not in kind, from that normal group known as the general population.

Who has not had trouble learning? Who has not struggled over some topic at some time? Even Einstein we are told couldn't do his early math. But we need not look to the famous to find examples. Look at us all. We have all labored at one time or another over one or another task of learning. We may have struggled to learn how to read. We may have labored with math. We may have struggled to learn how to hit a ball, ride a bike, do a dive, or dance a step. We may have a tin ear or a blind eye. We may not know up from down, red from green, or enough to come in out of the rain. We may not know left from right, or right from wrong, or do-do from shinola. We may not be good at math or be able to draw a straight line or level a beam or find Waldo. We may not know red right returning or when sailors take warning. We all have our lacunas, our lapses, our various disorders in the midst of our order. These problems are within us all.

Think of all the ingredients that go into learning. Begin with sight, hearing, touch, taste, and smell. Add language, that special instinct. Then add memory, attention, arousal, motivation, imagination, physical health, genetic make-up, and a host of other factors. No two people are alike in all these variables. No two people learn exactly the same.

We have names for certain patterns of learning that go off track in similar ways. I, myself, have written about one such pattern, called attention deficit disorder, and I carry that diagnosis myself. Let's take it as an example for a minute.

What is ADD? Guess what, no one really knows. I've written two books about it, and I don't know exactly what it is. I don't even think it is an "it," but more likely a "they," as all sorts of different conditions are probably crowded under the one term, ADD, now. The name Attention Deficit Disorder itself is a misnomer because people with ADD can focus very well at times. At times they can hyperfocus (focus better than anyone) and so to attribute to them a deficit of attention is to tell only part of the story. And to call what they have a disorder, well, pardon my defensiveness, but there are so many positive qualities that go along with ADD, qualities such as imagination, intuition, energy, tenacity, and open-heartedness, that I think it would make more sense to call it a syndrome rather than a disorder.

Additionally, no two people's ADD is exactly alike. There are certain commonalities, which is why we can call it a syndrome, but there is a world of variety under the ADD umbrella. Beyond that, ADD is a seductive diagnosis. Once you understand what it is, you see it everywhere. ADD becomes a metaphor for modern American life. Don't most of us have the cardinal symptoms of ADD: distractibility, impulsivity, and restlessness? Haven't most of us gone through periods where we couldn't stay on track, focus our attention, complete our tasks, comport ourselves appropriately, resist disruptive impulses, and stay put in one place for very long? Haven't we all felt antsy and rebellious and iconoclastic and outside the pale? It's fair to say that most of us have felt, at one time or another, the way people with ADD feel most of the time.

And there is the key to understanding the emotional experience of all these learning problems. We have all felt that way at one time or another. It is the intensity and duration of the feeling that separates ADD from urban life, and that separates a learning disability from learning, period. It is the intensity and duration of the reading problem that separates dyslexia from someone who was slow to read or stumbles over words. It is the intensity and duration of the problem that separates dyscalculia from trouble with math.

You would think that because we can all identify with these problems we would all be sympathetic with them. Sad to say, what often happens is just the opposite. It is because the average person has felt that way at one time or another but manages not to feel that way all the time that the average person says, "Well, if I could cope with it, so should everybody else. If I could overcome stumbling over words, so should everybody else. If I could pay close enough attention to learn to add correctly, so should everybody else. If I could learn how to read social cues, and overcome that one year I was unpopular, so should everybody else. If I could learn to speak French, so should everybody else."

Because learning is difficult for just about all of us at one time or another, this leads many people to conclude that learning is purely a matter of effort. Because trying harder has helped all of us to overcome some difficult moments in learning, this leads many people to conclude that the only treatment for any learning difficulty is to try harder. Because learning hurts at times, this leads many people to conclude that the best way to teach is to inflict pain, and the best way to learn is to suffer.

While effort almost always pays off, effort is not the whole treatment for true learning disorders. In fact, effort alone can backfire. The student can try as hard as he can for as long as he can—and many of these kids are unbelievably tenacious—but finally reach a point of saying, "Look, all my best effort still falls short. I guess I'm just dumb." In that way, effort can go wasted or even make the individual feel worse.

To tell the student with a learning disorder to try harder is like telling the near-sighted student to squint harder. This is where empathy fails, at the point where occasional blurry vision becomes near-sightedness, where the isolated event becomes the constant occurrence.

Let me take you into the world of a woman we can call Laurie. "It is very subtle, but it is profound," she said to me. "I don't remember ever thinking clearly. I just assumed that this is how it was for everybody. I believed the nuns when they told me I was slow. I believed my father when he told me I had other redeeming qualities so not to worry I wasn't very bright."

"That doesn't sound subtle," I said.

"No," Laurie laughed. "that part certainly was not subtle. There's nothing subtle about the nuns I had and for sure my father hasn't made a subtle statement as long as he's lived, and that's over eighty years. What's subtle is trying to explain it. What's different about my brain? How has life changed for me since I found out I had Attention Deficit Disorder? What's new is that I have a name for what has been going on. The reason I don't want to take any medication, even though you say it might help, is that I want to explore my brain using this diagnosis as my flashlight. I want to look at how I do everything in light of knowing about ADD. It's hard to describe how you think, if you don't have any point of comparison. And the only vocabulary you've been given to describe how you think is negative. I've always known I wasn't slow. Even when the nuns told me

that, I knew it wasn't true. I wasn't afraid of them, even though they whacked the side of my head every time I missed a question or made a peep. I wasn't afraid of them."

"How did you know you were smart?" I asked.

"I just knew it. I could see things they couldn't see. I questioned what they took for granted. I could tell by the way they explained things they were just repeating what someone else had told them. I remember one day one of the nuns asked me why I didn't try harder, and I told her I tried as hard as I could. She told me that was too bad because it meant I was pretty slow if I was trying as hard as I could and this was all I could do. I asked her how she knew what I was trying hard at, and she said, 'Oh, really.' I remember that as if it were yesterday. She said, 'Oh, really,' just like 'Nyeh, nyeh,' in that sing-song tone of voice eight-year-olds use. I know, because I was eight. I knew then and there she was dumb. She'd said 'Oh, really,' because she was too slow to follow what I had said, that maybe I was trying hard at something other than what she wanted me to try hard at. It just didn't compute in her set of options when I asked her how she knew what I was trying hard at, so instead of asking me what did I mean, she just said, 'Oh, really,' just like the stupidest kid in class would have said on the playground. What I don't understand is why they wanted me to think I was stupid?"

"What they did do to me is make me feel that I was different, maybe even a little crazy. Maybe more than a little crazy. Because it makes you feel very strange not to be able to match up what you're thinking inside with what is being asked outside. I was always on the wrong page, it seemed, although what was on my page was intelligent stuff. But I didn't get credit for that."

"You were pretty strong not to start believing all the bad things they were saying."

"I was, you're right," Laurie said proudly. "I was stubborn, too. I think I take after my father that way. He is such a mule. But can you imagine what it is like to go through 33 years of life, knowing you're different but being unable to say how? It's affected everything about me. That's why it is going to take me a while to get to know who I really am."

I see people like Laurie every day. Men and women who have lived lives of heroism, working against the odds, not knowing what they were dealing with, but dealing just the same. I think it must be a little bit like being in a boxing match blindfolded. You keep swinging, but you don't know where the next hit is coming from or what your opponent looks like. And the blindfold itself is invisible, so the opponent keeps hitting, unaware he is beating up on a blind person.

Listen to these words from a tenth-grader. "You don't know what's going on except that you're stupid. 'Why should I do my work' I used to say to myself. 'What difference does it make?' I would try; I would try so hard that it hurt, but then the grades would come in, and it would be the same old story. I hated school so much; you can't believe how much I hated it. It was like going to get tortured every day. And there was no way around it. People stared at me like I was some kind of a retard, like a piece of garbage. You know, like I smelled. I could see it in the eyes of some of my teachers. It was like they felt sick to their stomachs that they had to waste their time trying to teach me. I was a loser, as far as they were concerned. They tried to hide it from my parents, and they would be really polite at parents' night, and they would say all kinds of really concerned-sounding stuff,

but when we got into the classroom and we were together, just the teacher and the kids, it was real clear to me how they felt. You know how you can tell when someone hates you without them having to say anything?"

"You think they hated you?" I asked.

"No, I guess they didn't hate me. They just thought I was a useless piece of junk. And I was always making their jobs difficult. I didn't do it on purpose, but I did it just the same. What's amazing to me is how they thought I was not learning on purpose. Why would anyone screw up on purpose?"

"Do you think you might have had an attitude that made them think that?" I asked.

"Sure I did, after a while. But they should have seen through me. They didn't have to treat me like garbage."

Life is hard; some people will respond. Teachers are imperfect; schools are understaffed and overworked. They do the best they can with what they've got. In the long run, to get ahead in this world, you need hard work and luck, and being smart helps, too. Life is not fair.

That is true enough. But we have the responsibility to insist on something better. Think of children. Think of those little faces, those little minds rushing into classrooms. It is the densest distillation of the life force we have, children's energy. Walk down any lower school corridor, even with no children in it, and you will feel that life force emanating from behind the classroom doors, filling the corridor as if with magic light. Look on the bulletin boards at their little projects, scrawled in colored pencil, a map of South America looking like Jimmy Durante's nose, or a colored-in bar chart of birthday months in grade two, looking not quite like the annual report of IBM, or the row of raincoats hung on hooks on rainy days, red and yellow slickers, waiting to be wiggled into.

Where there are little children, there is life. You all have seen those faces, you all have been those children once. And you all have had the pleasure, I hope, of being taught by one great teacher, and you all have known the pain of having been hurt by one careless teacher.

There is no reason we cannot insist upon love. There is no reason we cannot insist that our children be treated with respect and that schools not be places of humiliation but places of exploration built upon an ethic of love. Do to others as you would have them do unto you. There is no reason we cannot insist upon that for our children. There is no reason we cannot demand it of ourselves, and there is no reason we cannot require it of our schools.

There is no reason to punish our children as we educate them. There is no reason to spill the springs of trust, enthusiasm, open-heartedness, and joy they bring with them to school in the name of academic excellence. In fact, the more we feed those springs the more excellence we'll develop in our children.

Our schools should be built on love above all else. If we look into the eyes of the child sitting at the back of the room, watching us as we explain whatever it is we are explaining that day, we will see why we are here at all. We will see our parents' lives and their parents' lives, and their parents' parents' lives, and if we look deeply enough into those eyes, we will see the chain of being that we might take as meaning. We will see the reason we get up and go to work, and the reason we hope against hope that each story will have a happy ending. We will see why we care.

Always look into the eyes of that child, looking up at you for guidance, looking up at you with the innocent notion that the worst thing he can do is trick you

out of ten minutes of recess. Look into those eyes that know so little of evil, betrayal, and tragedy, and know that all you have to combat the darkness of life is the light in those eyes, a light that your love can brighten and protect. Whatever happens to you the rest of the way, stay true to those eyes and to that child.

CHAPTER 3

Attention and Learning Problems

Strategies for Primary Care Physicians

GERARD A. BALLANCO

[This chapter is directed primarily to primary care physicians, but the information may be useful to anyone in the front lines who deals with children.]

> *"The teacher said he's immature and should repeat kindergarten. Is that a good idea?"*
>
> *"My sister thinks my son should be tested for ADD. Do you do that?"*
>
> *"His grades are OK, but I don't think he's really learning to read. What should I do?"*
>
> *"He's always had to work very hard in school to get C's and D's. Now he's fighting school, smoking, drinking, and running with some kids we really don't like. What can we do?"*

How many of us have heard these and other questions that parents ask about their children: the ones who are struggling in school, aggressive on the playground, negative at home, or finding success only in destructive activities? These are the questions of children and families in such intense pain that it can almost be weighed. The pain is all the worse because it is often unnecessary.

Identifying a school-age child at high risk of having a significant learning difference or problem paying attention is not an easy job for a pediatrician. Pediatricians see children frequently during the preschool years; but, after the "school shots" have been given, the annual doctor visits seem to stop. Kids come in when they are sick. Busy doctors don't ask "irrelevant" questions. Sick children don't want to talk about school, and tired parents want to go home. So . . . questions are not asked, information is not offered, and opportunities are missed.

Identifying a child in trouble is not easy for a parent. Most parents are confi-

dent that the child's teachers will let them know if there are any problems to worry about. Many parents have heard of learning disabilities and attention deficits but have only a vague idea of how they might look in a child. Parents often don't ask questions or complain to the doctor unless the child has emotional or behavioral turmoil. Many recognize the struggle, but don't know what to ask of whom, and worry and suffer in silence. Often they blame themselves or each other for poor parenting or the child for not trying. Many parents don't think to ask their child's doctor about school problems.

Teachers, perhaps, are in the best position to recognize a child at risk of failure. Unfortunately, many teachers have not been taught how to recognize early warning signs. They care and they notice, but they don't understand the significance of some behaviors. They hesitate to raise questions for fear that parents will become defensive or accusative. They worry about causing unnecessary expense or worry to parents if their concerns are unsubstantiated by "experts."

Twenty percent of children have learning disorders and/or attention deficits that put them at risk for failure. More than 50 percent of incarcerated juveniles have diagnosable learning disabilities. Children with unrecognized learning problems often develop depression, apathy, and loss of motivation, symptoms very suggestive of Post-traumatic Stress Disorder. Doctors have to ask meaningful questions about home, school, and playground at every opportunity or these children will be missed until a crisis occurs.

TABLE 1
Responsibilities of the Primary Care Physician

Identification
Evaluation
Resource depot
Support and coaching

Physicians frequently handle complex medical problems by identifying significant symptoms, evaluating according to ability and comfort level, and referring patients to another professional for a second opinion, special tests, or therapy. The job then becomes one of coaching and giving support, explanations, and advice. Problems at school are really no different.

Each pediatrician and family practice doctor has a different level of knowledge and understanding of attention deficits, learning differences, and behavior. Those with special training, special interest, or personal experience with school issues will do a more expansive evaluation than those addressing these issues by identifying only. That is not different than with more traditional medical issues. Do what you are capable of and comfortable doing, then treat or refer for further evaluation. Working successfully with children with school difficulties is an extremely rewarding and satisfying adventure but the first few times are scary.

The professionals that are encountered in school situations (teachers, administrators, school counselors, educational and school psychologists, tutors and educational consultants) are usually new to physicians. The skill of each can be evaluated by the same criteria that are used to evaluate a medical consultant's judgment and management ability. Does the person have a reputation in the community for skill and integrity? Does the individual seem knowledgeable and able

to explain diagnostic and therapeutic options using vocabulary that you (teachers, parents, and child) can understand? Are descriptive words rather that judgmental words used to describe the child? Are the patients you send to this person happy, improving, and satisfied? Does the consultant help you help manage the problems? It does not take long to develop a resource base in most communities. Many teachers and school counselors know individuals in the community who have helped children with different school related problems. Organizations such as the Orton Dyslexia Society, C.H.A.D.D, and The National Center for Learning Disabilities have information useful to parents and professionals.

TABLE 2
Children at Special Risk

Children who have:
Chromosomal disorders
Significant dysmorphic features
Development delays
History of an insult to the CNS

Children who have chromosome abnormalities, developmental delays (including speech delay), significant dysmorphic features, or history of major insult to the central nervous system are at special risk for problems with behavior and learning in school. It is not unusual for some of these conditions to be recognized because of extra scrutiny caused by school difficulty. When considering the possible causes of school trouble, keep in mind such relatively common conditions as Fragile X Syndrome, Turner's and Kleinfelter's Syndrome, Fetal Alcohol Syndrome, Marfan's and Marfanoid Syndromes, and Neurofibromatosis. (This is not an exhaustive list.)

Screening questions, at well or sick visits, offer an opportunity to recognize strengths and brag on the child, as well as identify areas of concern. If asked "How's school?" a youngster will usually answer "OK." That's the universal answer. It must be followed with "Is OK A's and B's or C's and D's?" "What do you do at recess?" Answers such as "fight," "stay in class to finish work," and "nothing" should be investigated. "How long does it take to do homework?" If the answer is out of a reasonable range or homework is a major battle, a high index of suspicion should be raised. The answers, positive or negative, need to be confirmed with the parents and their input sought.

The family needs to feel that school and behavior issues are important to you, as the child's physician. This gives validity to the parent and child's concerns that are usually present long before official school recognition is expressed. It makes possible the mobilization of emotional and financial resources necessary to confront school issues, rather than pass them over as "something he will outgrow."

Messages from School

Whether we like it or not, school has come to be the testing ground of competence; too seldom is school the caring, nurturing nest in which young minds blossom

into capable, inquisitive treasures. Too often are struggling children found to be at fault because of poorly understood developmental facts.

Warnings from School

"Immature"
C's in early grades
Recurring negative comments
Inconsistency
Poor peer relations
Behavior problems

Teachers are usually caring, competent people who are highly motivated. When they run into a youngster whom they can't teach or understand, they become concerned, sometimes frustrated. Depending on training, experience, administrative support, and a number of other significant factors including compliance with state and federal law, a teacher may mark or miss early warning signs of difficulty. Each of the items in this box should be considered a significant warning that the child is struggling, unsuccessfully. If any or all are present, investigation is warranted . . . NOW!

"Immature" is a useful descriptive term, but when used as a diagnostic term has vicious malignant potential. It implies that if you do nothing, these problems will just go away. Very rarely is that the case. More often, this behavior is regression to earlier behavioral strategies because of inability to meet expectations, feelings of being overwhelmed, or a manifestation of primary attention deficit behavior. Immature behavior requires evaluation and explanation as well as remediation and management. Retention in grade is a devastating event for a child. He feels shame before his family and is exposed to the jeers of peers. If he were capable of learning, he would have learned. He needs clarification of the problem and development of strategies to teach him in a mode in which he is capable of learning, not a rerun. Sometimes the child simply could not survive if advanced to the next grade and the school does not have the resources to catch him up in the next grade. So be it, but teaching strategy needs to be adapted to him, or he will be revisited by failure in school, and is at high risk for becoming a drop-out.

Everyone loves pre-K and kindergarten teachers. They introduce us to the magical world of written symbols. They make learning fun with songs and dances, hands-on work and experimentation, hugs and smiles, and repetition, repetition, repetition. In the first and second grades, these trends continue, even though classes become less tactile, less active, less noisy, and, unfortunately, less fun. During all of these grades, material is very repetitious, and context is familiar and easily reinforced by parents. Children should make A's and B's. A single "C" is OK. Repeated C's (or "needs improvement") should cause alarms to go off. Do not look at performance level only or children with compensating strengths will be missed. Look at the specific skills that are being stressed (grapheme/phoneme association; blending sounds; audio or visual memory; etc). Look very carefully.

Kids want to do well in school. A two–month–old child smiles because (s)he is genetically programmed to do so, and (s)he finds it very rewarding. The young

child sits, walks, talks, and explores because of the same innate human drives. The early years of pre- and elementary school are blessed with children whose minds are eager to learn and to please. This is the way human beings are made, and (without major life stresses present) there is no such thing as a young child unmotivated to learn or cooperate with the teacher. A young child who consistently does not pay attention, listen to adults, follow rules, keep track of belongings, learn letters and numbers, sounds and symbols is in trouble and needs help, not punishment.

School is a wonderfully important vehicle of socialization. Rules of fair play and interaction are taught and learned throughout. In addition to explicit edicts for specific situations, parent, teacher, and peer modeling behavior helps little people develop internalized ideas of appropriate conduct. When a child fails to follow appropriate rules of behavior toward parents, teachers, or peers, he is going against developmental norms. That only happens when something is wrong.

Impulsive children are especially at risk. Their behavior is tolerated poorly by adults and peers alike. They ultimately come to be rejected by both, often developing oppositional, aggressive, or face-saving behavior in response to perceived or real intolerance. This further isolates the child. Self-esteem is very difficult to maintain in the face of nearly universal rejection. Imagine the pain of going to school where no one likes you or wants to sit with you. A rejected child needs help, urgently.

Don't get caught in the trap of "he's just a boy, he'll outgrow it." Many of these kids are struggling and don't understand why. If warning signs are present, you do the child and family a huge disservice by not focusing your attention and theirs on defining the area of difficulty. This puts the worries on the table, gets guilt and blame out of the way, and lets parents and teachers help not harm. Most importantly, it gives the child an explanation for the difficulty that he is experiencing. Kids and parents can cope, but they need to know what they are coping with.

Parent Concerns

It usually doesn't take us long out of medical school to realize that parents really know much more about their child than we do. If parents tell you that their child is having to study ridiculous hours to learn, that there are battles being fought about homework, that the child is getting good grades but can't read, . . . listen to that parent! Excessive fighting about going to school, refusing to share school events, and lack of pride in school work is worrisome. A previously compliant, easy child who suddenly becomes oppositional or aggressive is screaming: **SOMETHING IS WRONG.** These situations call for immediate investigation to cause. It does little good and can cause significant harm to "wait to see what happens."

When talking to the child and parents about school problems, be sure to highlight the child's strengths. It's easy for a family to fall into the trap of focusing so much on the areas of difficulty that the child's successes are minimized or he is forbidden to participate in them. These successful areas are really more important than the problem ones because these are the tools he will use to be successful in adult life. Your trusted voice and coaching can help the family keep perspective and balance.

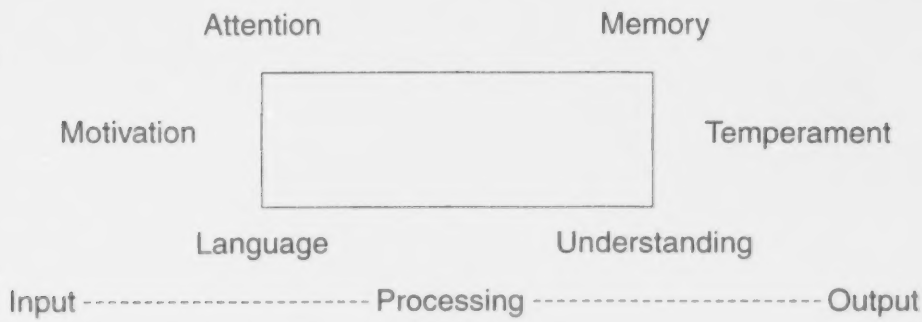

FIGURE 1
Interactive Elements of Learning

Just What is the Problem

After deciding that there is a problem, an accurate description and delineation of strengths must be made explicit. Decisions need to be made by you and/or the professionals that you consult as to whether the problems are primarily attention, learning difference, maladaptive behavior because of learning frustration or other life forces, or a combination of factors. A diagnosis may be necessary for services, but the descriptive element is what will guide the therapy and understanding. Very few children have identical profiles of strengths and problem areas just as very few children with eye trouble need the same prescription for their lenses; and, these individual variations are critically important. A global diagnosis such as "dyslexia" or "ADD" does not give enough information to the therapist to design treatment strategies that will be beneficial.

The components of learning style (attention, biological, and environmental packages) interact with each other in ways that can balance a strength with a weakness or gang up with each magnifying the other for good or harm.

Although not explicitly in the diagram, social skill or weakness, athletic or artistic strength, family and financial factors are all strong modifiers of school success.

Reflection on our own learning lets us readily see how the basic elements or phenomena of learning interact. If anxiety, pre-occupation, or primary attention deficit results in problems paying attention, memory suffers. If we don't understand something, it's hard to pay attention or remember the material. If spoken or written language is problematic, mental energy will be drained from the primary activity (information) to decoding the language and gain will be less than ideal. Temperament influences interest; success influences motivation. Motivation and interest influence attention, depth of processing, and retention. These and other interactive elements must be looked at and described.

This unraveling requires a bit of training and experience. Some physicians' major medical interests lie in other domains and don't have the time available or training to tackle the details of evaluation. They will need community resources to do this. However, the child and family must be supported and guided. This requires understanding of children and families that is common to caring physicians.

Attention Deficits

Short attention span, overactivity, and impulsivity are the three most broadcast symptoms of Attention Deficit Disorder with hyperactivity. Other manifestations such as inconsistency, insatiability, and poor reinforcability are beginning to get greater recognition as significant factors. An overactive, impulsive child may be manageable at home, but will get the attention of adults in the school setting relatively quickly, increasing the probability of getting help. This child is often called "immature."

The less ostentatious Attention Deficit Disorder without hyperactivity seems to be much more difficult to define and can hide for a long time. A youngster who sits quietly, getting adequate grades in the early school years may not be learning basic skills or learning strategies. This child will start to demonstrate dropping scores in the third or fourth grades, have increasing difficulty in the fifth and sixth grades, and meet the Great Wall of China in the mass of decontextualized material, prioritizing needs, and memory demands of seventh grade. A particularly bright child may get into high school or college, but only by the hardest work and with the best luck. This youngster is often called "lazy, unmotivated, ne'r-do-well."

Attention Deficit Disorder with or without hyperactivity seems to be a syndrome with national attention. Too many children are being diagnosed on the basis of checklists without adequate evaluation and consideration of factors that influence behavior, motivation, and attention. Too many folks are looking at attention problems as the mother of all difficulty and don't look closely at the whole child. Too many are putting too much emphasis on medication and neglecting strategy development and the all-important explanation to the child and family. Children are being accused, not coached and assisted. Not enough help is given to the parents, schools, and teachers to help them understand and promote success in the child.

Parents often feel guilty about their inability to "control" or help their child. The scientific information that many of the behaviors the child displays is the result of unusual wiring of the brain needs to be offered. When parents understand the child doesn't get the opportunity to think about what he is doing before he acts, they gentle their criticism of themselves and their child. If you describe to the parents the kinds of things that impulsive kids do, they begin to recognize that you are describing their child even though they may not have discussed these particular behaviors with you. They begin to realize that maybe you have seen other children like theirs and their confidence and insight grows. Parents shed many tears of guilt, relief, and happiness when they realize their child is not a bad child and that they are not bad parents. Often they recognize many of the traits being discussed in themselves or relatives. They can empathize and stop blaming. Discipline becomes teaching, not punishment. Hugs and effective management replace spanks and loud voices.

Teachers also benefit tremendously from this insight. As discussed in the chapter by Mel Levine, attention can be discussed in terms of its components and phenemonology. By dissecting attention into functional components, teachers can focus on the specific aspects of this child's attention problems and adjust classroom procedures or teaching techniques to accommodate and focus the child. Parents can do the same; frequently, they already have.

If a physician prescribes medication, there is often an expectation that all elements of difficulty will melt away. In children with relatively uncomplicated attention problems, many problems do disappear, but many children with attention problems also have unusual learning styles or a repetoir of maladaptive behavior. Medication does not solve learning problems or necessarily ameliorate learning differences; it does not bestow good judgment or experience. The only thing that medication does is to allow the child to think about what he is doing. Beneficial results that follow medication are a secondary result of the child's thinking about what is going on and his choice of an appropriate response. The medication does not control the child, it allows the child the opportunity to make choices.

> I met Tre' when she was five years old, near the end of her kindergarten year. She was getting into trouble for not sitting still at story time, changing activities too fast and without permission, excessive talking, and interrupting the teacher and other children.
>
> She was a bright, bubbly child with wonderful language skills and imagination. She smiled almost constantly and rattled on incessantly. She quickly complied with requests, but, very soon afterwards, forgot the request. When reminded of a transgression, such as interrupting, she was obviously contrite; then, five minutes later was likely to commit the same offense.
>
> This delightful child was coming home crying about school and was beginning to resist going to school. At home, her previously pleasant humor frequently turned sour.
>
> At the end of the evaluation (a PEER neurodevelopmental exam), I asked her to draw a picture of a man. I left her with her mom for five or ten minutes and returned to see that she had draw a picture of a man...who had his arm around another man. Both were smiling and walking dogs, (drawn with good detail). The dogs were also smiling and all were walking down a road lined with flowers. The background contained a tree and the sun, the foreground had a big rock with a TV sitting on it. The request was to draw a man.
>
> Suggested strategies at home and school were successful for the balance of the year, but in first grade, her inability to focus on less stimulating tasks was causing her to get into trouble, so medication was started. When I saw her later for a routine visit, I recalled her picture and asked her to draw a picture of a girl. She asked me, "Do you want me to draw a picture of just a girl, or can I draw a whole picture?"
>
> This true vignette demonstrates what the medication had done for her. It allowed her to distinguish the different options, but did not dampen the marvelously rich imagination that she had.

Often, significant family turmoil and serious disagreements between parents have resulted from the child's behavior and their different ideas about the best way to manage it. This needs to be aired and addressed; scars need to be softened. It is amazing how quickly family bonds firm when information is presented and effective management is instituted. Parents who are divorced often disagree about causes, strategies, and management of behavior and attention problems. It's a

tough session or two, but, frequently, when both parents are brought together in the same room and this information is discussed, meaningful compromises can be reached. It is critical that both parents speak, are heard, and have their concerns considered. If only one parent will meet, written material can be offered to the absent parent or questioning grandparent.

Children may resent being different and consider themselves "damaged goods." Some children and parents actually go through a mourning period that requires sensitive handling. Don't make light of this. Encourage parents to be journeyman with their child or each other and share similar experiences in their lives. Having a parent who has a similar problem insures that one parent will have real understanding and empathy with the child and gives the youngster a living, real role model for success.

Learning Differences

A child's physician is not an educational diagnostician but is in position to recognize when a child's school progress is not meeting expectations, when lack of social skills is causing trouble, or behavior problems area occurring.

Early validation and referral of a youngster with delay in acquiring academic skills is important so that these problems don't spawn secondary effects that may mask the true cause. A child who can't read may claim he isn't interested in reading. He may clown around during reading and fight about reading at home or class. He may become seriously oppositional to avoid detection. The treacherous thing about this is that if this youngster is bright, he can figure the meaning of words from context or site and not be identified until he begins to read for information. He knows that something is wrong, and will do anything to avoid being discovered. This situation results in anxiety, perhaps anger. This child is often accused of not trying or not caring.

The report card may indicate problems in specific academic areas such as reading, but may not indicate areas of neurodevelopmental delay or dysfunction. The child may have trouble with reading because he cannot associate a letter's written symbol with its sound. He may have no difficulty with associating a written symbol with its sound, but may be unable to blend those sounds into a meaningful word. He may be able to do all of the above, but can't remember the beginning of the paragraph when he gets to the end. A particular child may have corresponding strengths that allow him to pass in the early grades, but he will falter when he has to read for information in the grades beyond third or forth. Remediation for each kind of reading difficulty may be different.

An important point to be mentioned is that even overactive and inattentive children often learn in the *earlier grades* because of the repetition, multisensory teaching, and familiar context. If a child has learning trouble in the early grades, be very cautious about attributing this to a problem with attention alone. More often, this youngster also has an unusual learning style that is interfering with adequate learning. In higher grades, unrecognized attention problems may be solely responsible for learning deficiencies. Keep in mind the data that suggests that nearly fifty percent of children with attention deficits have other neurodevelopmental delays or differences that interfere with learning or school production and vice-versa.

The educational consultant should be able to identify areas of academic diffi-

culty and develop strategies to help as well as offer helpful suggestions to teachers. Elemental neurodevelopmental strengths or problem areas can be identified by individuals with training. This information can be shared with child, family, therapist, and teacher to help understanding and fine tune strategies to help. Many physicians don't want to get this involved with educational issues, but all can look for early indicators of trouble.

What to do Now

After a child with a significant neurodevelopmental delay has been recognized and appropriately evaluated, the real work begins. Explanations must be offered that are realistic, understandable, and humane. Parents must understand to be of proper support; the child must understand to be able to help himself. If school delays are present, teachers must be given insight as to how this child learns, tutoring for content or strategy or educational remediation must be initiated, and the two must be coordinated. Counseling for child or family may be necessary to un-learn patterns of behavior.

Many parents and teachers have observed that at certain times, a child with learning or attention problem can learn or pay attention with ease. They logically, but incorrectly, conclude that if he isn't doing it, it must be due to a lack of effort. To help them come to grips with this maddening inconsistency, it often helps to share recent, preliminary neuroanatomic and neurophysiologic research findings. Compared to normal readers, individuals with dyslexia (research focus):

- demonstrate reversed asymmetry or symmetry of the language portions of the brain;
- have a pattern of gyrus formation in language areas that is different, with the gyri being smaller than "normal readers" and the pattern of sulci distinctly different;
- have islands of brain cells in areas that are supposed to be free of cells;
- have different blood flow patterns during reading compared to normal readers.

Similar differences in brain morphology and physiology are demonstrated in the frontal lobes of individuals with primary Attention Deficit Disorder.

A youngster exposed to this information may conclude "I'm brain damaged. I knew I was stupid," so be careful. It's probably best to avoid neuroanatomy and physiology discussions with the child unless they are late-teens and really push.

A safer way to approach a youngster's learning difference is to talk first about people who are right- or left-handed. Some people are large, others small; there are good athletes and not-so-good athletes; people who learn when they read, and people who learn better when they hear or see pictures. All of these are differences that are supported by differences in their bodies. Your child's trouble learning is not due to being stupid; it is the different way that they learn. We need to teach to the way that they learn. It is critical to identify real strengths that can be brought up and put to the child into the above litany of accepted differences. Give examples, and don't exaggerate or make up stuff, or the child will turn you off.

One of Mel Levine's excellent suggestions is to number the areas of difficulty

so that the child can box them in and not generalize about being a total wreck. Emphasize the areas of functioning that are perfectly fine or superior and box in the areas of delay. For example: "You are a pretty smart guy, and you have proven that by how well you have learned to fix your bike and other stuff. You have lots of friends and learn math well. But you have two problems that are causing a lot of trouble at home and school. First, you frequently don't think about what you do or say before you do it, and it's hard to pay attention when stuff is boring. Second, it's hard for you to figure out how to blend sounds to form words. That's why it is so hard for you to read. We can do a lot to help both of these problems, but don't get carried away, there's a lot more about you that is good and right than these two areas." Obviously, the vocabulary and complexity of this presentation has to be geared to the child's age and ability to understand.

Emphasize that this not volitional. Neither is it an excuse. A person with a different learning style will have to work harder than most other students to get the same results. Hard work is not damaging; it's failure that is so catastrophic. Teachers and parents can accommodate and assist an individual with differences and difficulties without being condescending or fostering incompetence. Physicians are in an ideal position to promote or moderate this important balance at home and school.

Above all, promote hope. Don't try to anticipate what a seven–year–old will be like when he is eighteen. Human resilience and adaptability is phenomenal when given proper support. Don't set limits. Encourage dreams.

Your voice, as a physician and child advocate, carries tremendous weight. Parents, children, teachers, and administrators listen when you speak. Learning the details of evaluation may not be in your plans for ongoing medical education, but you can do so much good by just paying attention, asking the right questions, and responding vigorously to need.

Working with children with learning or attention problems is one of the most rewarding endeavors that an individual can imagine. Freeing a child and family from the guilt and shame of school failure is one of the greatest joys of pediatrics.

CHAPTER 4

The Learning that Comes before Learning

BETTY EDWARDS

During the late sixties, I spent five years teaching art at Venice High School in the Venice area of Los Angeles. Venice High is located in a working class area and, at that time, had a reputation as a "tough" school for teachers. As a new teacher, however, I enjoyed my job there. The school was about evenly divided in terms of ethnic groups, and though most of the students had no plans for college, they generally took school fairly seriously in those days.

Nevertheless, like students everywhere, they complained loudly and often about what they were required to learn in order to graduate. I listened to the students' complaints, and I gradually came to sympathize with them. Their arguments that they had no possible use for much of what they learned carried a ring of truth.

I believe this Venice High experience was the start of my questioning of accepted school practices. I recall talking with the physiology teacher who told me that half of her class had failed a final examination. I asked about the test, and she told me that she required her students to learn the Latin names of all the major muscle groups in the human body. Naively, I asked what possible use that would be to her students and besides, I asked, "If they ever needed that information, couldn't they just look it up?" The teacher answered, "I want them to learn how to memorize." Without thinking, I said, "Why don't you just teach them how to memorize?"

Foolish question. That is not the way schools work. In American public schools, the desired skills often are taught only indirectly. Teachers present children and adolescents with the materials they are to learn, like a list of spelling words or a list of events leading to a war. The teacher discusses the material, perhaps putting it into context with other materials, and subsequently tests the children on their abilities to spell the words or list the events.

The skills required to test well on these materials are memory strategies, such as putting information into a different format (for example, diagramming), forming visual images, or rehearsal strategies such as acronyms, rhymes, or paraphrases. Teachers may suggest these strategies as methods to enhance performance on the coming test, but the *test* is on the subject materials.

As another example, third grade elementary school students in Potomac, Maryland, in 1995, are taught *and tested* on the history of Maryland for the stated purpose of causing the students to learn how to read for comprehension, pay attention, remember significant facts, form concepts, consolidate information, and derive meaning from disparate bits of learning.

Is this efficient? Is there another way? Couldn't we teach the skills that lie beneath the learning we require? Couldn't we empower all students with the powerful skills that our "best" students acquire largely outside of school, by means of family money for tutors or family coaching on the secrets of academic success.

This unfair advantage is held by only a few students which became clear to me later on when I was teaching at California State University in Long Beach. I was offered an opportunity to teach basic drawing skills to a group of university "honors" students, a small, elite group of students with grade-point averages of "four-point," meaning straight A's in all subjects. I strenuously prepared for this class, expecting the students to be very intelligent, intellectually challenging, and unusually creative.

To my great surprise, these students, who carried the "honors" label, experienced the same difficulties in learning to draw that so-called "regular" students experienced. By the end of the semester their drawings exhibited the same high level of achievement that I would have expected from an average class—no more, no less.

But the honors students were different in other ways. They were never absent from class—not one student in the entire semester. They were never late for class. They came to class with the proper materials. They always made certain that they understood assignments. They turned in every assignment, always on time. They made special efforts to clearly understand what would be covered on quizzes and exams, and they came fully prepared for every test. The intellectual challenges and lively discussions I had anticipated mainly centered on clarifying possible exam questions and my grading procedures. In other words, they excelled at being students, and certainly we must give them great credit for that.

The implication of the label "honors student" is that individuals so labeled are superior in intellect and therefore destined for economic, social, and cultural success. The questions that occurred to me then and still bother me now are the following:

- What do school grades really mean?
- Could we teach school-success skills *in school* in the early grades so that all students could excel at being students?
- If we were successful in teaching school-success skills, what body of knowledge would remain to be taught? What do students really need to know? If everyone succeeded (every child would be an "honors student"), would we be willing to give up the *selection* aspect of the present grading system—that is, using grades and standardized tests to select out the "smartest" students for further specialized schooling and denying further schooling to those selected by grades for school failure? Would we be able to change the present paradigm of school from one of selection to a *success-based* model?

The reason I am asking these questions is that in my work I have focused on teaching students the secrets of success in drawing, but I have also taught the skills that lie beneath the skill of drawing. These skills are not drawing skills, but instead are

seeing skills—more specifically, perceptual skills. I teach students how to "unlock" visual information and how mentally to put it into a form useful in drawing.

This is vastly different from the way drawing is usually taught. Let me describe what happens in a typical class for adults in courses titled "Beginning Drawing." The students come into the first class meeting. The instructor introduces himself/herself, points to a still life set-up, and exhorts the students to do the best they can in this first drawing assignment. They are told to express "the tension between the objects in the set-up, the emotional ambiance created by this tension, and the ultimate resolution that can occur between the objects, the tension, and the emotional evocation created by the objects." He or she then says, typically, "Well, go ahead and get started. Use any medium you wish. I'm going out for coffee and I'll be back in time to see how you handled this assignment."

A silence falls over the room. The instructor leaves and the students, who probably believe that every other student except themselves understands the "instruction," begin to set out their materials. They have no idea about how to start, what their drawings should look like, or what the teacher meant by the "instruction." When the teacher finally returns, he/she indicates in words and by actions that he/she will know by looking at the drawings which students have "talent for drawing." Often this means picking out two or three drawings to discuss, leaving the others aside and thus implying that they are simply not worth spending time on.

Those who have failed this test-for-success will very likely not return for the second class meeting. Is this fair? Do we really believe that "talent will out?" Do we really believe that only a few will—or can—succeed? Do we really believe that by selecting a few we are teaching the others how to succeed? What are the skills *beneath the skills* needed to carry out the drawing instructor's assignment? If those hidden skills aren't taught in "Beginning Drawing," where can a beginning student learn them?

My example may seem extreme, but is my hypothetical Beginning Drawing instructor's teaching much different from the Venice High School physiology teacher, the Potomac, Maryland elementary teacher, or, for that matter, much of what passes for instruction in basic English and basic mathematics? It does seem to me that, in the present school paradigm, we are still mainly teaching more or less advanced *applications* of underlying skills with the hope that students will self-develop those hidden, underlying skills. Can we blame students, who haven't discerned the hidden agenda, when they bitterly complain that what they learn in school is boring, irrelevant, and of no use to them?

I'll try briefly to describe the underlying skills I am teaching in my five-day drawing course. The first step in teaching underlying skills is to determine *what are those skills*. I have determined that drawing perceived objects (as opposed to imaginative drawing) is a global skill made up of five component perceptual skills. I have designated the five components as follows:

- the perception of edges;
- the perception of spaces;
- the perception of relationships;
- the perception of lights and shadows;
- the perception of the *gestalt*, the "thingness of the thing."

As in any global skill (driving a car, skiing, typing, dancing, reading), the components are necessarily taught somewhat separately. They are then combined into a

smoothly integrated, automatic global skill, from which one part cannot be easily separated out. The function of practice is to further automatize the global skill.

In my teaching, I begin with the assumption that learning to draw well depends on proper instruction, and that drawing is a skill that can be taught and can be learned at almost any age above age seven or so by any person of reasonably sound mind. I also believe that learning to draw well does not require special talent for art, just as learning to read well does not require special talent for language. Furthermore, I believe that drawing does not require special eye-hand coordination or special manual dexterity. At its most basic level, drawing is simply a skill. To carry that skill to its highest level—to "Art with a capital A"—surely does require special abilities, but the same holds true for language skills. We do not teach basic reading skills for the purpose of producing a few poets or writers, but rather to improve verbal, analytic thinking. I believe a similar purpose is appropriate for teaching drawing—not to produce a few artists, but to improve visual, perceptual thinking. The real value of teaching all students how to see and draw is that they also learn how to access and use visual functions that often go untrained in our modern public schools.

Because I assume that any student can learn to draw well, given proper instruction, I therefore assume the responsibility for the success of every student. If one form of a teaching sequence fails to help a student, I try another, and then another, until the student truly understands. In order to teach for success, I and my group have had to reduce our teacher-student ratio from the usual university ratio of one-to-twenty-five to one-to-fifteen, and I need to be with the students for a total of forty hours to teach the whole set of five component skills. Forty hours is about the usual total for a semester class, and our so-called "killer" class is eight hours a day for five days, or a total of forty hours.

I believe a major difference between my version of teaching and the more usual school practice is that the focus of my teaching is on the skills that underlie the global skill of drawing. My students, naturally, make drawings using a variety of subject matter. But the focus of instruction is not the drawing nor is it the subject matter. The subject may be a still life or a person, but the focus is on, say, negative spaces or complex edges. Assessment also focuses on the basic component skills. Does the student's drawing demonstrate understanding of negative space? Does the student need to practice this particular component before integrating the next component skill of perceiving relationships?

Once my students have a firm grasp of the basic underlying perceptual skills of drawing, they are *then* ready to take a course in "Beginning Drawing." They will be able to handle the instructor's noninstruction in basic drawing skills and to benefit from the instructor's guidance towards expressive drawing and the use of various mediums.

Summing up, the basic assumptions that I hold are the following:

- Given proper instruction, every child or adult will achieve high-level drawing skills. Special "talent" is not a prerequisite.
- A student-teacher ratio of no greater than one-to-fifteen is required if every student is to succeed.
- Students must acquire all of the basic component skills of drawing in order and through practice to effectively automatize the global skill of drawing. Once the skill is thoroughly understood, learned, and practiced, students can then draw whatever they perceive, no matter how complicated.

- Given proper instruction, students can transfer the thinking strategies learned through drawing to other disciplines—for example, reading comprehension and mathematics comprehension.
- Having learned how to see and draw, the most basic entry-level skills that underlie the whole field of art, students who are so inclined can explore painting, sculpture, or design and can follow their interests as far as they wish. (We understand and accept this idea in teaching reading, writing, and arithmetic—that these are basic skills that underlie advanced learning.)

Could these ideas be useful in teaching subjects other than drawing? If these special conditions result in virtually 100% success in achieving drawing skills, a field of learning previously thought to be inaccessible for a majority of students, could we expect even better results in reading, writing, and arithmetic, subjects we feel every child is able to learn?

I fully realize that public school art teachers in the middle and upper grade schools will not soon be provided with the luxury of a one-to-fifteen teacher-student ratio. In fact, across the nation, art teachers have been the first to lose jobs when budgets are cut.

But in the key subjects (reading, writing, and arithmetic—and eventually, I hope, drawing) and in the crucial early grades, what might be the result of cutting student-teacher ratios in half, teaching the basic underlying component skills of the key subjects, and teaching for *every* student's success rather than selection by grades? Do we know and can we agree on what the basic component skills are? Are we willing also to teach young children how to succeed in school—as a school subject—rather than accepting as inevitable that some will fail?

I read a statistic recently that seems to apply here: in the nation's prisons, the "normal" ratio of guards to prisoners is one-to-five. Surely, something is wrong here! In California, the prisoner-to-guard ratio is apparently one-to-twelve, and this "high" ratio has been blamed for some of the problems in California prisons. Just think what might happen in the prisons if they had to operate with the one-to-twenty-five, thirty, thirty-five, or forty ratios with which our public school teachers struggle.

Since school failure correlates strongly with imprisonment later in life, I wonder if we have the courage enough to reverse this statistic, to give our students their best chance for success by revising our thinking and our educational habit patterns that have so long accepted failure and near failure as "normal" and inevitable. Could we cut teacher-student ratios by half or even two-thirds? Are teachers willing to accept the responsibility for success for every student? Are legislators willing to accept that excellence costs money? Are we willing to exchange education for custodianship, happiness for misery, imprisonment for productive, creative contribution to the life of the nation?

We await the answers with bated breath. Shall we be disappointed and disillusioned again? Shall young lives be thwarted again and again? Shall the nation lose a new generation, a new infusion of brain power, a new vision for America's future?

CHAPTER 5

Pride, Intellect, Language and Emotion:

Reaching to the Heart, Teaching to the Head

PRISCILLA VAIL

Emotion, Learning, and Real Live Kids

Brains are power plants for learning. They work by firing off and receiving electrical impulses. Their interpretive and innovative energies travel along single pathways, vault across spaces, or work through thick bundles of connections.

For power to produce light, heat, or its other miracles, someone or some force has to move the appropriate switch to the "on" position. If the switch is "off," the power remains only a potential. Nothing happens.

Emotion functions as that switch, either closing or opening pathways to thinking and learning. Parents and teachers who acknowledge a child's predominant emotional stance can reach into and through the feeling, helping the child channel psychological and intellectual energy effectively. Far from imposing additional burdens, this recognition simplifies the job of parenting or teaching, and gives the child a psychological power booster. Often, a combination of common sense and practical suggestions can clear blocked pathways.

Let's look first at the location and role of emotion in the human brain. We can then explore the interplay of emotion and learning.

If the limbic system—the part of the brain thought to control and direct emotion—is so important, where do we find it and how does it work? To give ourselves general guidelines, we need to look at a triple-axis model of the organization of the child or adult human brain: left/right, back/front, and bottom/top. We will give more space to the latter, since it is central to our point, and because the information is just now becoming generally available.

Excerpted from *Emotion: The On/Off Switch for Learning* by Priscilla L. Vail © 1994. Reprinted by permission of Modern Learning Press, Rosemont, NJ.

Left and Right

We can read in heavy tomes or light-weight magazines about the specialized functions of the left and right hemispheres. The left hemisphere is responsible for verbal, linear, sequenced performance, while the right hemisphere is the source of intuitive, global, spatial understanding. It goes without saying that creativity springs from and abides in both domains. Fascinating as it may seem to tease them apart, a more sophisticated view sees how they operate together, since very few children go off to school in the morning leaving one hemisphere sitting at home on the bureau.

The more we learn about the power of interplay between right and left, the more we see the foolishness and danger in oversimplifying a complex process. Recently, I had a phone call from a mother who was in panic from this piece of cockamamie: "Sarah's teacher just told me my child is completely left-brained. What will become of her?"

Back/Front

In considering the second axis, back/front, we can think of the back as the repository for many and varied kinds of information, and the front as the selector, choosing a course of thought or a plan of action. Jane Holmes Bernstein, from Children's Hospital in Boston, used the analogy of the back being like the entire symphony orchestra, and the front being the conductor who tells the musicians whose turn it is to play. The conductor has the whole score, and sees to it that melody, rhythm, and coordination work together to play the piece.

Bottom/Top

Moving from bottom to top, we have what Paul MacLean has called the "Triune Brain." The lowest level, the reptilian brain, contains the brain stem—an extension of the spinal cord which houses the arousal system. Next comes the limbic system, the emotional brain, which includes the *hippocampus*, the *amygdala*, and the *hypothalamus*. Above the limbic system is the *cerebral cortex*, which "furnishes us with our most human qualities: our language, our ability to reason, to deal with symbols, and to develop a culture."[1] Because it sits in the middle layer of the bottom/top axis, the limbic system is like a gatekeeper for incoming stimuli, and a dispatcher that sends interpretative messages to higher cortical territories. Here is how the process usually works.

An incoming stimulus first tweaks the arousal system. Arousal sends it up to the limbic system for interpretation, and the limbic system then broadcasts its interpretation of the stimulus up to the cortex.

For example, I may hear the sound of the dishwasher going on, notice it, and understand both the sound and its implications, but it won't rock my emotions one way or another, or unglue my thinking. It will have traveled from arousal to emotion to neocortex, remaining a non-event.

Suppose, however, that my arousal mechanism picks up an unexpected sound. The emotional brain will interpret whether it is something ominous . . . perhaps a burglar . . . or whether it is simply a one-time, unfamiliar, sensory experi-

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[1]Richard Restark, *The Brain* (New York: Bantam Books, 1984), p. 136.

ence. If my limbic system decides the sound is threatening—by itself or by implication—it will broadcast a danger message. In response, the metaphoric pathways, doorways, and windows connecting the limbic system with higher level cortical process will constrict, shrivel, or close down, limiting my access to my own memory, reason, and the ability to make novel connections or to create. Thus, my capacities for thinking and learning are seriously compromised.

If, instead, a positive stimulus reaches my arousal system, arousal pops it on up to the limbic system, and my limbic system says, "Yes! This is entertaining, interesting, of great practical use, sexy, funny, or something I can use to 'astonish family and friends'," the limbic system broadcasts a message of purpose and excitement to the higher neocortex. At that point, the number, breadth, and depth of connections between stimulus, emotion, and thinking expand, increasing my access to my own experience and ideas, and enhancing my ability to make novel connections, to reason, and to create. Thus, my capacities for thinking and learning are expanded, extended, and enhanced.

At such moments, the left/right axis, the back/front axis, and the bottom/top axis hum with interconnections, putting the child or adult as actively in touch with his or her capacities as is humanly possible. And, in all humans, the interpretive message from the limbic system—the emotional response to a situation or event—overrides other messages just as a public address system overrides an inter-office phone call.

These interpretations are based on memories of past experiences, as well as immediate reactions to present events. Joseph LeDoux, a psychologist from the Center for Neural Science at New York University, said, "The *hippocampus*, for instance, is involved in recognizing a face and its significance, such as that it's your cousin. The *amygdala* adds that you really don't like him. It offers emotional reactions from memory, independent of your thoughts of the moment about something."[2]

Thus, since past experiences and memories color children's current learning and schooling, wise parents will consciously work to insure that the majority of their children's experiences load them toward a positive limbic response. The general tenor of daily activity before and after school, as well as what happens in class, fosters the emotional response with which the child will meet the world.

Teachers need to recognize their responsibilities to maintain a positive emotional climate in the classroom through their own demeanor, and through the type and variety of methods and materials they use. They also need to be alert to signals of emotional discomfort, understanding and anticipating the probable consequences in the affected child's learning. "Further, we know that coercion and humiliation are poor incentives to serious learning. An affirmed student learns; a hectored student resists. Such is not only warm sentimentality; it is cool efficiency."[3]

To cite a specific example involving math anxiety, a study by Tanis Bryan of the University of Illinois and James Bryan of Northwestern University documents the correlation of positive mood and math performance. "Overall the results of these studies conducted with children find that positive mood improves the amount and rate of learning. Happiness seems to have a positive effect on children's learning, memory, and social behavior. It is believed that positive mood states induce higher levels of activation and faster and more efficient information-

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[2]Le Doux, *New York Times*, July 15, 1989.

[3]Theodore Sizer, *Horace's School* (Boston: Houghton Mifflin Co., 1992) p. 143.

processing strategies, whereas sad moods may cause children to become more withdrawn and inattentive."[4]

If all this is so, how is it germane? What kids should we notice and how might we help them? In the classrooms I work in and visit nationwide, I see kids whose intellectual batteries are drained by social/emotional considerations. Irritants to adults and enigmas to themselves, they do not qualify for the increasingly scarce or overgeneralized help available. Yet, unarticulated difficulties and unmet needs lower the level of group function, and are also barriers to personal fulfillment.

Underacknowledged or misunderstood, these students create problems. Recognized and helped, they could release their productive energies. Some are silent sufferers; others are noisy nuisances. A few are dangerous. All are in need.

Concerned adults can help, first by raising their own awareness, next by increasing their own knowledge, and then by taking small, practical, helpful steps. The following section provides a framework.

Six Guiding Principles

Successful child raising and exciting education incorporate six guiding principles. Listing and exploring them will help parents evaluate what their children are receiving both at home and at school, and will help educators assess the academic fare they are offering while also noticing what students bring with them.

These six are found in healthy schools across the nation, be they urban, rural, public, parochial, independent, small, or large—with hefty or marginal budgets. Although any list risks errors of inclusion or exclusion, this collection is built not only on my work and observations, but on long-standing investigations and recommendations by such luminaries as Theodore Sizer, Howard Gardner, Lillian Katz, and James Comer, as well as the experience of several educational/corporate partnerships. These six guiding principles, singly and together, are emotional fuel for learning. They help kids turn the switch to On.

Emotion and intellect fuse through:

1. Prompting Motivation
2. Sparking Curiosity
3. Nourishing Intellect, Talent, and Power
4. Encouraging Connections
5. Assessing Growth
6. Accepting Special Considerations

1. Prompting Motivation

Motivation starts with an idea and a hope, gathers momentum, and sustains a plan. This is the difference between motivation and a passing fancy. People frequently say to me, "Someday I'm going to write a book. Really. I'd like to." What

[4]Bryan and Bryan, *Journal of Learning Disabilities*, Vol. 24, #8, October 1991.

they mean is "I'd like to *have written* a book, been on Oprah, and be rich and famous." Soon, they think of something else and are off on a different pursuit. Motivation and whim differ in length, depth, and intensity.

Under the word *motivation*, my dictionary lists "motive power: the energy, or source of the energy, by which anything is powered." Where do we tap into it? How is it sustained?

Think about a diet. First comes the notion. But, paradoxically, motivation coupled with momentum comes AFTER willpower or exercise melt the first three pounds. The four-step internal pep talk says:

Others can do it.

I'd like to.

I can.

I did!

Think about learning to play tennis. First, it's an idea. But, the initial act is difficult, humiliating, and sometimes even physically painful. It's tempting to quit. Some people do. Motive power surges AFTER you've hit the sweet spot. You continue trying, hard and often, if you've done it well once. Then,

Others can do it.

I'd like to.

I can.

I did!

The same litany works in school, from Introduction to Trigonometry to learning to decode c-a-t. The first job of teachers and parents is to focus hard on "others can do it," bringing an idea or whim into the realm of possibility. Next, to set the stage so the student really means, "I'd like to," break the task down into manageable chunks and increments. Next, to coach from the sidelines to insure, "I can." Finally, adults need to stand back and get out of the way, letting success belong to the learner who says with wonder, "I DID!"

From diet to sports to academic learning to the murky labyrinths of human psychology, motivation and competence reinforce one another.

Here are some strategies to prompt motivation.

- Activate prior knowledge: hitch new information to a familiar concept. It's virtually impossible to join two unknowns.
- Teach kids to ask the five "Plan of Attack" questions:
  1. What do I already know?
  2. What do I need to find out?
  3. Where can I get the information?
  4. How will I collect and catalogue it?
  5. How will I use it—in what kind of final product?
- Insofar as possible, give the "locus of control" to the student.
- Reach different kinds of learners through a variety of approaches, which might include visual aids, manipulatives, and the use of graphs as well as paragraphs. Arrange diverse measures of mastery such as exhibitions, portfolios, or refrigerator displays. Working in the concrete as well as the symbolic realm increases the chances of tapping into all students' capabilities.

- Find ways to make the new information or technique immediately useful.
- Establish goals and standards for mastery/completion. Reveal them, don't conceal them. Help kids see where they are on THAT path, not in the mark book or some secret "ledger of good people."
- Provide opportunities to showcase or display results.

2. *Sparking Curiosity*

The human may be the only species able to ask a question. This unique capacity opens a door to understanding which must be both guarded and opened, if real learning is to occur. My friend and mentor, a professor of child development at Bank Street College of Education, says that when she was a little girl returning home from school, her father, a rabbi, would be waiting at the door to scoop her up, give her a kiss, and say "Leah, what good questions did you ask today?"

We need to revere the messiness of questions as well as the tidiness of answers. Children who have been trained that the main goal of schooling is to give correct answers are limited to learning from other people's discoveries.

True learning, at home or at school, is highly aggressive. True reading, although done sitting down, is active—not passive.

What should we do? To spark curiosity, let's first find out what our children are interested in learning about. If they are interested in clothing and food or other cultures, or games children played in different times, or what happens to animals when they hibernate, we can frequently tailor our classroom investigations—as well as individual projects and family conversations—to match the interest. Sometimes, we have to be sneaky and bait the trap, by linking what we know students are already interested in to what we believe it is important for them to learn.

- Teachers and parents who honor originality over conformity make curiosity and risk-taking safe. The error half of trial and error is the source of some glorious mistakes and original discoveries.
- The tenets of cooperative learning—in which problems are tackled by small working groups, instead of unwieldy whole classes or solitary moles—are suitable for home as well as school. They open avenues for curiosity.
- To sustain curiosity, give the learner some latitude and choice in how to demonstrate new capacities or knowledge. Being shackled to mandatory, three-page, topic-sentence book reports is a quick way to send a budding reader off to Nintendo.
- Adults should double-check kids' understanding of the concepts of space and of time, as well as their receptive and expressive language levels, in order to be sure the children have the conceptual foundations needed to knit the familiar and the unfamiliar together. There is no point in trying to spark curiosity about **aborigines** of the **archipelago** among children who have neither knowledge of geography nor the concept of first settlers. Think back to motivation, and breaking tasks down into manageable chunks.

3. *Nourishing Intellect, Talent, and Power*

To establish this principle and the learning it prompts, we need to promote three good R's and prohibit one bad one. Desirables are: *Receive*, *Ruminate*, and *Respond*. The miscreant is *Regurgitate*.

Receive is easy. Adults in the child's life want him or her to receive accurate factual information, aesthetically appealing experiences, and opportunities which nourish imagination. In addition, some aspects of *Receive* involve rote learning, a threshold to be crossed in entering a new discipline.

Through *Rumination*, the learner absorbs what is offered, mulls it over, makes connections to memory and the intellectual or emotional storehouse, and soaks the new information in existing connotations, so it becomes a central part of the person's thinking and feeling. This takes time and privacy.

Neurologists are now exploring the concept of *convergent zones*, interconnections of thought which give many dimensions to a single word or object.[5] For example, the word "cup" may call to mind the function of a cup, or the physical properties of a cup, or the type of cup the listener or reader owns or aspires to own, or the shape of the word in print, or the strings of sound necessary to speak or spell cup, or words which rhyme with cup. The list is endless. Of course, the greater the number of associations, the richer the web of convergent zones, and the greater the variety and texture of thought available to the thinker.

"Our memories are stitching and knitting all the time the fabulous tapestry of our associative inner lives such that we are, in our present lives, always connected through memory to the vastness of our pasts, in all the details and arresting vividness of the original events."[6]

How do we support this part of the learning process? The richer the child's experience and exposure to ideas, the more creatively complex his or her convergent zones will be.

After *Receive* and *Ruminate*, the stage is set for *Respond*. By this I mean the opportunity to make a creative product through words (written or spoken), or the arts, or a model expressing the learner's reactions to what has been learned. The child who reads or hears a story might make a diorama showing major scenes from the narrative, or a set of drawings, or one drawing showing a favorite episode, or might pantomime part of the story, or design a set and costumes for a dramatization, or write a book report, or talk to a friend, or act out being one of the characters. This is a far cry from the stultifying *Regurgitate*.

Occasionally, one still sees teachers or parents who read a story (or ask the children to read it), and then ask such questions as "What color was the girl's dress?" "How many children were in the family and what were their names?" "Where were they going in the car?" Retrieving and regurgitating factual information represents one kind of mental process, but not one which I would call thinking. *Why* and *how* are questions which tap into the depth and breadth of receiving and ruminating.

Sometimes, teachers or parents will say, "There isn't time for *Ruminate*. There's too much to cover." In my experience, it is far better to read three books and exercise the three good R's than to read six books, leapfrogging from *Receive* to *Respond*. A wise friend once said to me, "The purpose of studying a subject is not to cover it, but to uncover it."

If we skip right over *Receive* to *Respond*, we steal the child's chance to make

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[5]Convergent zones: *New York Times*, Sept. 10, 1991. Also *Scientific American Special Issue: Mind and Brain*, Sept. 1992. Also Kinoshita, "Mapping the Mind," *New York Times Magazine*, Oct. 18, 1992.

[6]Edward M. Hallowell and Michael G. Thompson, *Finding the Heart of the Child* (Braintree, MA: Association of Independent Schools of Massachusetts, 1993).

the information, concept, or story part of a personal/intellectual/emotional matrix through *Rumination*. How does this work across different disciplines?

Rumination belongs to mathematics as much as it does to language arts or science. *Regurgitation* is the companion of arithmetic.

Wrongly, because some adults overlook the distinction between arithmetic and mathematics, many children think the terms are synonymous. Pencil-paper arithmetic demands tidy numeral formation, straight columns, and accurate (often rapid) computation. Correct answers are the keys to the kingdom.

Mathematics is the realm of questions. It is both a language and a symbol system through which the learner can explore the ordering principles of our universe. Yet, some young thinkers with sophisticated mathematical ideas are weak in arithmetical tallying and recording. As we have mentioned before and will see again, strength in the 3-Dimensional realm (mathematics, science, engineering, the arts, hands-on learning, and knowing how to fix broken machinery) often coexists with weakness in the 2-Dimensional symbolic realms of reading, writing, spelling, handwriting, and pencil-paper arithmetic. When this happens, young students—male or female—may mistakenly decide they are "lousy in math," when in fact they are weak in numeral writing and memorized calculation. The world turns off natural mathematicians through this misinterpretation.

We need to include playfulness, novelty, and exploration in math. Experiences outside of school, such as surfing the supermarket, are ideal for estimating, tallying, and seeing different results from different ways of spending twenty bucks. In school or at home, playing with patterns and solving puzzles with tangrams or geoboards bring excitement to the fore and mastery within reach. Asking kids to see how many ways they can find to build a number demonstrates the alternatives which are part of the fascination of math. Just last week, a first grade class was building the number 20. Some of their ideas were: 10 + 10, 30 - 10, 10 + 2 + 8, 20 x 1, 20 - 0, and 5 x 3 + 5.

Many teachers or parents, nonscientists themselves, avoid this discipline because they are afraid they don't know enough. Sadly, particularly in middle schools, science instruction emphasizes regurgitation: read a section, memorize lists, take a written test. True science, in contrast, invites the learner to 1) make a hypothesis, 2) observe, 3) decide whether empirical observations confirm or contradict the idea, 4) figure out why, and 5) map new ways to get similar results in parallel experiments, or 6) devise novel applications for the knowledge.

"I wonder . . .", "Maybe . . .", "Do you suppose . . .", and "Let's try . . ." are the *lingua franca* of the scientist. These are the same questions which enlist intellect, talent, and power. Science is for questioners. "If they had wanted to stay safe, Galileo would have trained his telescope on the building next door, and Darwin would have stuck to pigeons."

In the arts, we want to expose children to excellent models, introduce them to classical techniques, but then encourage them to break out on their own, avoiding the "How to Copy a Flower" concept—another form of regurgitation.

To nourish intellect, talent and power we need to:

- discard the notions that we can spot intelligence primarily by hunting for high test scores, and that it belongs exclusively to pale, owl-eyed students who lurk in the library. We need to expand our own perceptions and definitions to include the traits of intelligence, power, and talent delineated by Galaburda, Gardner, Kaufman, Renzulli, Sternberg, and Vail, which we will

explore in considerable detail in the last section, Accepting Special Considerations.

- decide what aspect of intellect, talent, or power we're really trying to reach, and then aim specifically for that area, instead of running around aimlessly with an academic cattle prod.
- find, meet, and acknowledge what Howard Gardner refers to as the five–year–old thinker inside each of us. In *The Unschooled Mind: How Children Think and How Schools Should Teach Them*, Gardner points to countless examples of students who have learned formulaic operations in class, but do not use these precepts in thinking about the real world. Even smart kids with diplomas from fancy institutions are vulnerable to this kind of laminated learning—glued on from the outside but not interwoven with the child's intellectual matrix. To do justice to intellect, we must lead the thinker, instead, to what Gardner calls Christopherian Encounters (named for Christopher Columbus)—a kind of thinking in which intellect and reason override the obvious truth that the world is flat.
- remember that children who are gifted in the 3-D world (math, science, engineering, the arts, athletics, etc.) may be at risk for 2-D endeavors with printed symbols (letters, words, numerals, process signs in arithmetic). Although detailed solutions do not belong in this section, this seems the right place to underscore that these children need multisensory teaching, access to the concrete as well as the abstract, and chances to explain, display, and demonstrate what they have learned. Harking back to motivation, intellectual appetite is whetted by success.
- provide opportunities for kids to be smart without being embarrassed.
- avoid the rush to the *appearance* of knowledge: surface, speedy, temporary.
- avoid the dilemma of the prisoners of perfection— children whose identities are so linked to getting the highest grades or having their perfect papers displayed on the walls of the school or refrigerator, they're afraid to risk a novel thought:
  - the junior scholastic Faust who sells eagerness to question for a set of correct answers;
  - the pint-size cynic who cons the system so successfully that true hard work no longer offers merit or excitement;
  - the "tidy little girl" whose unbitten pencils write correct answers in blanks in workbooks from the supermarket, who memorizes and recites easily, who convinces others (and herself) that she is gifted when in fact she is merely meticulous.

4. *Encouraging Connections*

Children who make connections move eagerly from one subject to another, shifting from the vocabulary and concepts of math to those of language arts or social studies, adjusting their frames of reference when it's time to change classes. At the same time, they see how and why what they learned in social studies is useful in creative writing, or how the arithmetic they are learning in school parallels setting a budget or tallying baseball averages. One might say their convergent zones converge on one another.

Eagerness to make connections is one of the hallmarks of intelligent thinking.

It depends on being able to make distinctions, and on orderly *filing*, smooth *retrieval*, and ease in *recombining*.

Filing

The efficient learner, who will make connections easily, mentally files emotional, physical, and intellectual experiences in an orderly way. Language is the foundation and the tool.

Being disorganized is quicksand to efficient learning. Yet, many intelligent children have littered or misplaced mental files, thus their retrieval systems—which may have been grope and grab operations to begin with—are compromised. Not surprisingly, their efforts at recombining enjoy irregular, sporadic success. These difficulties are aggravated by (and often caused by) problems with language.

Categories for efficient filing include the six *wh* words (*who, what, when, where, why, how*). Who was involved—one or many? What was the main event? When did it occur? Where did it take place? Why does it matter? How does it relate to other experiences or perceptions?

Retrieving

Smooth memory function allows a thinker to select needed information from the vast convergent zones of personal experience, emotion, and thought. And, of course, effortless retrieval depends on orderly filing. Otherwise, retrieval is like rummaging around in the socks drawer at night with no lights on.

Disruptions of retrieval are embarrassing, annoying, or disastrous. Some people have trouble with rote memory. Even though they have wide and accurate memory for experiences and feelings, they have trouble memorizing arithmetic combinations, lists of presidents or monarchs in succession, or scientific formulae.

Others may have trouble with target word retrieval. They know exactly what they want to say but the necessary word is "just on the tip of my tongue." Stymied by retrieval, these clutterers fill their speech with time buyers such as *and um, the um, like, you know,* and indefinite markers and pronouns in place of names. They describe objects by function instead of label.

At Show and Tell, Marcia said, "We went, you know . . . me and my family . . . to that place where they have the um . . . um . . . it's blue and like tall, and sloshy, but I forgot to bring mine cuz I wasn't sure we were really going to go, at least, well, not then, maybe. So, and my cousin, which is fatter than I am, had two but I didn't want to, you know, sort of have my brother make fun of me, so instead I . . . Well, Mom says we can go another time."

The other children, not to mention the teacher, were totally confused. Also bored. One said, "Hey Marcia, why don't you draw it on the board?" After two or three expertly drawn lines, the kids said in unison, "Oh. The water slide!"

Marcia had been trying to say, "My family and I went to the water slide. I forgot to take my bathing suit because I wasn't sure we were really going there. My cousin Julie, who is fatter than I am, had two bathing suits, but I didn't want to wear one because I was afraid my brother would laugh at me, so I just watched, but Mom says we can go back another time."

Recombining

Originality and creativity are expressed through novel combinations of ideas, concepts, or experiences. The thinker-learner files, retrieves, and then recombines. Doing this with efficiency, as well as enthusiasm, requires a rich supply of raw material, systematic filing as a foundation for precision in retrieval, and finally, the new and personal idea.

Those who are intrigued by this will find further amplification in *Learning Styles* (see the Resource Section), as well as in the earlier section, Nourishing Intellect, Talent, and Power.

Four great writers and thinkers express the importance of the above.

- On the importance of a wide and firm factual foundation, Pasteur wrote, "Chance favors the prepared mind."
- On the need for interweaving, E.M. Forster wrote in *Howards End*, "Only connect!"
- On the need for releasing imagination, Einstein wrote, "My gift for fantasy has meant more to me than my capacity to acquire positive information."
- On the need for ethical vision beyond the immediate excitement of discovery, Professor Abraham Tannenbaum of Columbia University spoke of the need to recognize "the moral consequences of having a very good idea."

5. *Assessing Growth*

While tests and testing are a fact of life, educators have progressed beyond thinking that the only way for a student to show learning is to write for three hours (or 45 minutes) in a test book in a proctored study hall. Some students perform exceedingly well under such circumstances. They are fortunate. Other students, who may know the material well and may have participated eagerly and constructively in class discussions, freeze. For both the fortunate and the unfortunate, the teacher in such situations plays the role of captor—possessor of the finite number of correct answers, a roster against which the students' efforts will be tallied. The underlying sense is that the teacher is out to catch the student in varying degrees of "un-knowledge," and "take off points" accordingly.

Now, moving far beyond this grim scenario, we have such concepts as performance-based assessment, exhibitions, and portfolios. Why and how do these work? Are these some new-fangled mollycoddlings from lazy-minded flower children? No. These procedures, in place in some of the nation's most academically rigorous schools, recognize that children—like the rest of us—enjoy demonstrating new competencies. They like to strut their stuff. These ways of measuring mastery encourage and display the habits of mind Theodore Sizer lays out for us: perspective, analysis, imagination, empathy, communication, commitment, humility, and joy. In other words, emotional engagement and intellectual growth.

By expanding the avenues that students can demonstrate mastery, we remove destructive anxiety and accommodate constructive energy. We Reach to the Heart as we Teach to the Head. The teacher shifts from captor to coach, from adversary to ally. These practices create a positive emotional climate while maintaining or raising academic standards. And guess what disappears? Cheating.

Here are some examples.

- Exhibitions can include such wide ranging manifestations as dioramas, skits, mock newspapers, models, works of fiction, or dance performances. One fourth grade class had been studying early settlements in the United States. They turned their classroom into a museum. Each small group was responsible for developing an exhibit showing life in one of the settlements. They were to make, draw, design, and show as many facets of life in this settlement as possible, and be prepared to describe how it differed from others. Each student in the class was responsible for being a docent for one part of the museum, BUT, since they didn't know which area, they had to be prepared for all of them. Finally, they were assigned their stations, given a few days to polish their information, and then for two days other classes came to visit the Museum of Early Settlement.

  In another instance, a group had been studying Athens in the fifth century B.C. Rather than give them a test, the teacher asked the class to brainstorm what topics a comprehensive newspaper about the era would cover. The group decided on local, national, and international news, editorial opinion, political happenings, gossip, sports, drama and entertainment, finance, war, education, births, marriages, obituaries, book reviews, and . . . comics!

  The teacher broke the class into small groups, each being responsible for one topic. The class elected a senior editor, layout and production staff, and they were off. It goes without saying that all students in that class had to be knowledgeable about the period in order to have enough substantiated information. The pride in the final product told the real tale. Jeb, a student who had never enjoyed school and never invested himself in any academic area, said, "It's great to show what you know!"

  The science teacher who lets students choose between making a model of a concept or writing an essay about it is honoring different learning styles, allowing for joy, and demonstrating faith that the kids know what they have learned.

  "The exhibition then is not only the target. It is also a representation of the way one prepares to reach the target. That is, school is about practicing to wrap one's mind around real and complex ideas, those of fundamental consequences for oneself and the culture. It is not merely about 'coverage,' or being informed, or displaying skills. It is the demonstration of the employment of all of these toward important and legitimate ends."[7]

- Portfolios show the evolution of competence. While some schools are using them incorrectly as models of perfected performance, the original design—which expresses the philosophical intention—shows pieces of work from the beginning of a process or competence and gives indications of problems to be addressed and suggestions offered, then shows work from the next stage with teacher and student comments, and then a work of the moment. The portfolio can be made of drawings, essays, poetry, fiction, photographs, or videotapes of art projects. Portfolio assessment is designed to show growth in an area, sustained interest, habits of perseverance, and the absorption of new learning. It is NOT designed to be a petal-plucking, good/bad, per-

[7]Stephen Jay Gould, *New York Times*, July 30, 1989.

fect/imperfect exercise. To focus on the perfection of the end product is to miss the point completely.

- Arts Propel is a project, begun by Howard Gardner and Educational Testing Service in the Pittsburgh public schools, designed to assess work in the arts. Combining portfolio development with teacher training in evaluation, the project—now in its fifth year—is designed to open the field of testing to young people who want to show their prowess.
- A few of the many additional measures of mastery which allow kids to show what they know without tears or panic are:
  - open-book tests,
  - take-home tests,
  - test answers spoken into a classroom tape recorder.

The parent whose child's school already incorporates these practices owes those teachers a vote of confidence and a personal thank you. Parents whose children's schools are not there yet might show this section to the appropriate administrator and volunteer to procure pertinent books from the Resource Section through the public library system, if the school does not already have them. The parent whose kids are stuck in a rigidly traditional system can incorporate some of these ideas for home projects. The point is to whet kids' appetites for new knowledge and competence by providing opportunity, learning . . . AND a showcase.

Four Sockets

Children overflow categories, and their needs and postures overlap. As adults, in looking for desirable or undesirable traits and impressive or mediocre thinking, we need to move beyond previous restrictive definitions, expanding our thinking to include the works of Howard Gardner, Robert Sternberg, Alan Kaufman, Joseph Renzulli, Albert Galaburda, and my own work on the education of the gifted. Familiarity with these works gives us additional lenses through which to see and help students, not to mention one another.

- *In Frames of Mind: The Theory of Multiple Intelligence,* Howard Gardner describes seven separate intelligences: logical/mathematical, linguistic, spatial, musical, bodily/kinesthetic, interpersonal, and intrapersonal.

  Evident as these abilities are in many major thinkers and contributors to our civilization, they may not raise a student's grade point average, and many of these intelligences go hand-in-hand with school failure. Gardner provides a scientifically respected way of seeing where a child is "at promise" as well as "at risk." Drawing from anthropology and the arts, as well as from education and science, he offers a generous way of looking at human beings.

  Gardner's work provides an expanded view of intelligence and giftedness. It is inclusive, innovative, and judged scientifically sound by his peers in medicine, science, and education.

  Since there is no normed test for these intelligences at this time, shortcut seekers will be disappointed. But, those who enjoy being sensitive observer/diagnosticians will be rewarded by clearer vision.

- In his book, *Beyond I.Q.: A Triarchic Theory of Human Intelligence*, Robert J. Sternberg teases apart three aspects of intelligence, and then shows us how each human being weaves them back together into a personal intelligence. He asks us to look at:

  internal intelligence—what the child or adult brings from within;

  external intelligence—what the child or adult absorbs from the outside;

  internal and external intelligence combined—the unique way each person fuses the two into perception, concepts, and ways of meeting and coping with life situations.

  Sternberg believes that giftedness shows in superior skill in insight and the ability to deal with novelty, and also allows for the inclusion of common sense and "street smarts" in measuring intelligence, increasing the opportunities and ways a person may show as intelligent. Thus, his bias is towards inclusion. His interpretation of both giftedness and learning disabilities implies that some people will fit both categories at once.

- Alan and Nadine Kaufman's work, based on the work of the Russian neurologist A. R. Luria and on the Kaufmans' experiences working with David Wechsler on the development of his intelligence tests, distinguishes between *simultaneous* and *sequential* thinking and learning.

  The Kaufmans add a heretofore missing dimension to the evaluation and discussion of an individual's learning style. The spontaneous, intuitive learner may do poorly in a bottom-to-top, sequentially organized curriculum. The child with weak rote memory who prefers manipulatives to symbols may have severe academic problems, and still be very intelligent. Discrepant patterns are confusing until we see their origins.

- Galaburda, continuing the work of Geschwind, shows us that tremendous potential for such *three-dimensional* areas as engineering, mathematics, science, medicine, the arts, athletics, drama, politics or the ability to fix the family car can coexist with difficulty in the *two-dimensional* areas of reading writing, spelling, or pencil-paper arithmetic.

  When kids do well on the athletic field but have poor handwriting, when an accomplished math student is a halting, clumsy reader, or when an artist can see the spaces in a building but not the spaces between letters in a spelling word, the adult world often loses patience, saying, "You only learn what you feel like learning." This unfair, negative judgment undermines students' trust in their own powers and enjoyment of their own talents. Such students need multisensory methods and materials, and opportunities to display their considerable skills.

- Renzulli, in his work on the recognition and nurture of giftedness, uses this overlapping circles model. We see that he refers to above-average intelligence, avoiding stratospherically high cut-off numbers. He speaks of task commitment, which is psychological and intellectual availability for learning, focus, and willingness to risk. He refers to creativity, for which it is our job to provide stimulus and showcase. This model, like the preceding ones, is inclusive rather than exclusive, permits many different combinations of tal-

ents and outcomes, and helps us recognize gifts and talents which may not have been apparent.

- In my own work on the recognition and education of the gifted, I have found ten traits which frequently cluster together in gifted people. These move us beyond the idea that intelligence is verifiable in any one single test score. They are: *recognition of new material, awareness of patterns, energy* (psychological and emotional as well as physical), *curiosity, drive and concentration*, wide and deep *experiential and emotional memory* (which may or may not accompany strong rote memory), *empathy, heightened perceptions, invulnerability* in the area of particular talent, and *divergent thinking*.

While these traits are exhilarating, they can also bring pain and misunderstanding. Knowing that different learners disrupt traditional classrooms, parents and teachers who are aware of these traits can see originality and creativity for what they truly are.

We need to create a "proclivities profile" on ourselves and on each kid in our family or classroom. It needn't be a polished literary document; something as simple as a piece of fool's cap, with a line drawn down the middle and columns headed + and -, will do nicely. Jot on it those things the person seeks out and those things the person avoids. Plan accordingly.

We need to share this proclivities profile with each child. Respond to their feedback by making alterations or additions. Support weaknesses, nurture talent.

By reaching to the heart as well as teaching to the head, we help each child locate and expand his or her own legitimate pride, burgeoning intellect, illuminating language, and powerful emotion.

CHAPTER 6

The Language Continuum

Learning Language and Using Language to Learn, the Twin Tasks of Childhood

KATHARINE G. BUTLER

Introduction

Over the past few years it has become a statement regarded as fact; children must first learn language, most frequently in oral form, in order to use language to learn. While this fact may seem self-evident after a moment's thought, providing convincing evidence of it has been another matter. Language researchers from a number of fields (e. g., psychology, psycholinguistics, communication sciences and disorders, early childhood, and child development) all contribute to our knowledge of how language is acquired and utilized in the service of cognition. Cognition, or "thinking," is intimately tied to language in ways we do not yet fully understand. Yet research over the past few decades has clearly shown that children's success in school is based upon their linguistic and cognitive skills. Thus, children with language disorders, developmental or acquired, are faced with great difficulties in the academic context of preschool, elementary, middle, and secondary school, and, certainly in postsecondary education. Equally, to our distress, research indicates that language disorders (i.e., disorders of listening, speaking, reading and writing, even with intervention) may continue into adulthood. In a postindustrial society, such as the United States, a society that is well into "high technology," the ability to perform all the functions of language (i.e., oral, written, and read language) requires that children learn not only the language of their homes but also the language of the school (whether it be in concert with the language of the home or distant from it). In fact, the notion that there are real differences between the language of the home and of the school has only been recently identified.

The language of the home is typically the language of the "here and now." Mothers, fathers, siblings, and caretakers typically address the immediate matters

of daily living within the context of the home, particularly with preschool children. "Did you pick up your socks?" "Come to dinner now." "Do you want to go shopping with me?" "It's time to take your bath." "Did you have fun today?" "What color is this?" "Tell your Daddy what we saw today at the mall." "Would you like me to read you a story?" These questions represent language as it is used in so-called mainstreamed (middle-class) families. In some families and cultures, these would not represent the conversations of the home. In middle-class America, they are quite common. Please note that a number of questions, most of them asking the child to reflect upon and report previously gained knowledge, require that the child account for, or recount, the activities of the day. We have found out amazing things about the early conversations that infants, toddlers, and preschoolers are able to bring about within the context of the home.

However, when we move to the context of the school, the scene shifts. What was "here and now" is no longer as important as the "there and then." Language specialists talk about the change from "contextualized language," meaning language that only requires the child to react to what is in the environment where the clues to meaning may be self-evident, to the "decontextualized language of the schools," where the clues are not present in the environment and meaning is gained from the spoken or written words in the environment. Spoken or written words can carry meaning about the past and future and do not require that objects be available in present time or space (the here and now). As time goes by (as the old song goes), the language of teachers and texts becomes more "decontextualized," i.e., is no longer linked to what is present in the environment, and can no longer be seen or heard. The example just given, "As Time Goes By," will mean little to readers who are not familiar with the title of the song of fifty years ago (or who have not caught "Casablanca" on late night television or in a classic film series). Thus it is with children: without adequate background knowledge, much of what is presented in school-based contexts may be meaningless. Meaning occurs only when prior knowledge mingles with new knowledge.

Meaning is found in both context and language, language in all its permutations—spoken language, read language, and written language. Students in classrooms are expected to understand and produce meaningful language—the language of academic subject matter, the language of literature, mathematics, history, science, social studies, and language arts, to name only a few. They must move from the explicit to the implicit, to what is said and written to what is not said and written but must be inferred. Summarizing, inferencing, questioning, analyzing, interpreting, all this and more is the grist for the academic mill, the everyday activities of the classroom.

Another important characteristic of the classrom is "teacher talk." I must quickly add that "teacher talk" is a part of almost every classroom in America. It is derived from the mission of the classroom, to convey knowledge to the student. Unfortunately, it is often presented in a form which is not readily decipherable to the child with language impairment or dyslexia. In fact, "teacher talk" and "text talk" may contribute to the difficulties experienced by children who experience difficulties with language comprehension and/or production. As we will see in the discussion that follows, instead of helping, adults often add to the confusion experienced by children rather than alleviating it. Language specialists refer to this as difficulty with phonology (speech sounds), syntax (the structure of sentences), morphology (the grammar of the language), semantics (the words used and their meanings), and pragmatics (the use of language in social situations). All

or some of these difficulties may contribute to a language disorder in speaking, listening, reading, or writing. The labels assigned to these children vary but include learning disability (LD), reading disability (RD), language impairment (LI), language learning disability (LLD), or dyslexia. It is highly likely that some or all of these labels reflect overlapping symptoms based on various aspects of difficulty in the language area.

In the following sections, we will examine how it is that the "child talk" of those children with language and learning problems interacts with "teacher talk," including teacher register, and "text talk," the way written texts in the schools move from a more comprehensible narrative genre to the more difficult expository text, and finally, how "clinical talk," a more supportive scaffolding approach, may be helpful to children with language comprehension and production difficulties.

Child Talk

Children enter into conversations long before they speak their first words. Infants begin by babbling in response to adult vocalizations, and by using more "speech-like" sounds than nonspeech sounds as early as three months. If read to in their first year of life, by eight months, babies have learned about the turn-taking activity of "reading" a book, and by toddlerhood, they are efficient in book-reading activities, taking turns in pointing and verbalizing. As we now know, literacy begins not upon entrance to school, but from infancy onward. At the oral level, even one-year-olds have adopted the appropriate pause time between themselves and their partners in a conversation. Typical pause length of one second is maintained between turns in mother-child conversations. As toddlers' "conversations" expand, they use eye gaze, body posture, and proximity (moving closer to the wanted conversational partner), as well as words and phrases to seek out multiple conversational partners.

As very young children move from babbling to words, from words to utterances, and finally to sentences and connected discourse (talk that goes across conversational turns), they now must learn to "manage" their verbal interactions with others. They must learn to begin conversations, i.e., to initiate topics, to maintain topics across turns, and to deal with multiple speakers across multiple turns while using language to express meaning. This requires a complex array of linguistic and cognitive skills as phonology, syntax, morphology, semantics, and pragmatics (the appropriate use of language) all come into play. Parents who talk when their children hold the conversational floor tend to increase communicative time pressure, resulting in conversational breakdowns under simultalk conditions. Not all late-talking toddlers will experience language difficulties. However, a significant proportion may do so. If one believes that an ounce of prevention is worth a pound of care, early intervention is now a viable alternative.

During the preschool years, many children struggle to "put it all together." Learning language is not a simple task. Some children who are destined to have difficulty in oral or written language show early signs of difficulty in the years before school entry. They may have difficulty with speech sounds, or word finding, putting words together, or such metalinguistic tasks such as early rhyming or word play. Even children who "outgrow" their oral language difficulties may resurface as reading or learning disabled in the school years, displaying difficulty

with phonological awareness, spelling, reading and writing, and so forth. In fact, as language becomes decontextualized across the elementary school years, these children have difficulty in elaborating on topics and following the conversational rules of the classroom, often garbling the telling of stories, missing the intent of a joke, an idiom, or a figurative phrase. Some begin conversations or stories "in the middle," leaving the listener adrift in a sea of confusion. Others have difficulty sorting out what is important in spoken or written discourse, while still others have continuing difficulty with decoding of the written word, or with longer units of spoken or written language. If a teacher's instructions are linguistically complex or require inferencing, children with language-learning problems frequently lose the thread, and are therefore seen as inattentive or recalcitrant. Frequently, an attention deficit disorder or an auditory processing difficulty may be suspected.

The oral language of the classroom increases in linguistic complexity over the years in contrast to the home, where parents and children continue to rely on the nonverbal context, routines, and familiar situations. The converse is true in the classroom. With the advent of reading and writing, language itself becomes decontextualized and is less tied to the here and now. Linguistic processing strategies are required to extract meaning from words rather than from situations. Written language becomes ever more complex. Children must address both the mechanics of writing (spelling, sentence structure, use of periods, commas, capital vs. small letters, etc.) in concert with the construction of meaning. Recent research has shown that in the later elementary school years, children with learning disabilities have great difficulty with the mechanics of writing and with getting "something down," while typically developing children have moved on to elaborating their narratives and addressing thematic issues.

American classrooms require that children organize larger and larger units of language as they become older. As children progress, they are expected to follow instructions which also become not only longer but syntactically more complex. An example might be the first grade teacher who accepted a work sheet from a six year old, glanced at it, and then said, "What is it that is not on this paper?" Completely bemused, the child checked the addition problems that she had completed, and found nothing missing. The teacher repeated her question, "What is it that is not on this paper?" The answer not forthcoming, the teacher pointed to the upper right hand corner of the paper, and said "There." This less-than- explicit commentary was not recognized by the child as a directive to print her name.

Older students must respond to even more unfamiliar instructions as they move into expository text, text that demand that they deal with unfamiliar content, variable text structures, logical inferences, nontemporal order, and abstract ideas to name a few of the barriers encountered. It is little wonder that many children experience difficulty with the classroom curriculum.

Turning the reader's attention to the attributes of classroom discourse in the following section provides an opportunity to view how teachers' talk may in and of itself contribute to children's misperceptions.

Teacher Talk

As noted above, spoken language is the primary avenue of instruction in the schools. While meant to facilitate acquisition of academic information, such discourse may be difficult for some children to comprehend. Teachers rely on instruc-

tional sequences called IRFs (teacher Initiates a question, student Responds, and teacher Follows up) or IREs (teacher Initiates a question, child Responds, and teacher Evaluates). Many teachers evaluate children's spoken or written responses frequently and formally. For example, teachers may begin by saying "Who knows why grass is green? John?" John hesitates, mumbles, and says, "I, uh, uh I . . ." and the teacher evaluates by looking at another student, and saying, "Betty?" By calling Betty's name, the teacher indirectly indicates that the time for John's response has passed, and Betty is now expected to respond immediately. In fact, research on classroom behaviors shows that most teachers wait only a second or less before making the decision to move on to another student. Research also shows that a "wait time" of three seconds may provide time for children to organize their thoughts and provide a more coherent answer. Unfortunately, research also shows that as students enter higher levels of schooling, the pace of teacher questions and instructions increases. While some children can handle a rapid pace of instructional sequences, others are less successful. Children whose families use "school-like conversational strategies" may come to school with a greater level of skill in responding to such question-asking strategies. When families use the language of the classroom in their conversational discourse at home, children have an opportunity to learn this more decontextualized sort of language and become familiar with the often subtle and implicit unwritten rules of classroom discourse.

The ingredients of teacher talk may be found in the teacher talk "register." In many classrooms, discourse is teacher-directed and bound by the topics the teacher has selected. An example from a seventh grade classroom might be: "Good morning, students. Today we are going to discuss the highlights of this morning's newspaper headlines. Name the most important thing in the news today." (The teacher may be thinking of national and international news, e. g. "Dole's Long Road Nears Summit" or "Death, Defiance in Gaza: The Painful Path to Peace." However, for those students who took to heart her previous day's instructions that they peruse the morning paper, their thoughts may be upon the sports section's "Flames Douse Sharks" or "Agassi Takes Over.") Because the teacher is unconsciously using the controlling or power register, she/he is focusing upon an implicit framework that student responses should reference the "larger issues of the day." Students who understand the teacher's questioning and tight management of topics will attempt to meet that demand. Others will be given short shrift as the teacher continues to control access to the conversational floor by responding positively only to those student comments that reflect her unspoken goals.

A frequent aspect of the power register is the asking of pseudo-questions, i.e., questions to which the asker already knows the answer. Such questions require that the student display his/her knowledge to the teacher and students in the class, a procedural and public display. The teacher who asks, "What follows the letter F?" or "Why did you hit Mary?" or "What does the word conundrum mean?" expects a brief response rather than an extended or elaborated monologue. In addition, the teacher also controls the parameters of what constitutes a correct response. Frequently teachers are seeking the "right answer," i.e., the response which fits their conception of the curriculum. "Almost right" answers are frequently not accepted. Rather, the formal evaluation by the teacher may consist of a brief "nice try" which the child interprets as "not good enough and therefore, no good." Meanwhile, the teacher moves on to another child, seeking the response that matches his/her's unspoken concept of accuracy.

In addition to the implicit aspects of the power register, classroom discourse

has other layers of difficulty for some children. One of these is teacher-whole class discourse; another is teacher interaction with an individual student, although the teacher tends to view this as an extension of teacher-class discourse, and a third is classmate discourse, either individually or with the entire class. There are subtle differences between these forms of discourse, requiring a knowledge of the pragmatic and linguistic "rules" for appropriate participation by conversational partners. Language learning disabled children are often found to have difficulty in conforming to these unspoken rules, another example of their difficulties with the social use of language.

It is important to examine instructional discourse because it is through the conversations in the classroom that children participate in learning. It is through oral language that literacy develops and is refined. For example, when children begin to write, they must assume that they are "speaking" to a real or imagined audience. This is very similar to the speaker-listener role relationship, wherein dialogue is constructed to make clear the speaker's purposes or intentions. Some differences between the oral and written mediums exist. When discourse is written, readers have an opportunity to reread what has been placed in print. When children do not understand the text, they can work at comprehension by rereading, identifying unfamiliar words and looking them up in the dictionary, outlining, summarizing, etc. Such metacomprehension strategies are much more difficult under oral language conditions. To learn through the oral medium requires that listeners be alert and attentive, since spoken language also requires that listeners process information accurately and rapidly. The twin tasks of accuracy and speed are embedded in many classroom activities. "Close your books and turn in your paper" is a refrain well-remembered by all who have attended school, as are the dreaded parental words, "You haven't finished your homework, have you?", a rhetorical question if there ever was one.

Teacher talk is a critical element in children's learning, but it is not the only element. "Text talk" can be a barrier in its own right. Face-to-text discourse is frequently more difficult than face-to-face discourse, particularly since it can be considered as "secondary" discourse, i.e., the author is not present, and there is no common or shared context. Do texts talk? Assuredly.

Text Talk

Learning from texts requires ever higher language skills as children move through the grades and through learning via narratives to learning via expository text. There is much current research on the differences between narratives and exposition. Narratives, i.e., stories, are typically meant to entertain. They provide a consistent text structure in that readers expect stories to have a beginning, a middle and an end, and a certain temporal order. Even young children anticipate that there will be main characters who will have adventures (illustrated through embedded episodes) and problems that will be solved. They demonstrate that knowledge by beginning stories with "Yesterday, I. . . ." or "Once upon a time. . . .", and concluding the stories with "That's all" or "the end." Children who have had considerable exposure to books at home come to school with background knowledge of the structure of stories, i.e., story schemas. Such schemas tend to be similar among speakers of the same language and culture but may differ significantly across languages and cultures. This can create difficulties in classrooms where children from

several cultures gather together, and some children can construct fictional narratives while others are familiar only with nonfictional narratives. In addition, narratives (the telling of remembered events, whether autobiographical or imagined) require that children organize their understanding of past events in a specific order and select the words that best interpret these events, both the real-world physical events and the emotions experienced by the characters.

On the other hand, expository texts require children to think in logical-scientific ways. Such texts are designed to "teach" and to inform. They have not only unfamiliar content, but the text itself may be structured in variable ways. While the narrative focuses upon characters' goals, expository text focuses on abstract ideas and requires logical inferencing (the ability to understand what is *not in* print). In addition, expository text frequently lacks temporal order and understanding of "connective words" is critical. Such words as "nevertheless," "finally," and "notwithstanding" require readers' scrutiny so that they may understand the meaning of the text. As children increase their vocabularies through the reading of narrative and expository texts, word knowledge is enhanced. It is truly a case of the rich getting richer and the poor getting poorer. If a child's language acquisition is limited during the preschool years, he or she will have more difficulty comprehending unknown words and connecting them with words previously learned. Conversely, if a child comes to school with an extensive understanding of words and how to use them, the child will find it easier to make new connections between words and concepts, expanding his lexicon and knowledge base simultaneously.

It has been hypothesized that children need to learn 100,000 words between the kindergarten year and the completion of secondary education. Since children are not explicitly taught all these words, it is assumed that children assign meaning by inferring from what is read and heard. When faced with complex expository texts in history, English, social studies, and science, children learn how to collect facts that are relevant to the topic at hand, organize those facts into a coherent schema, and interpret and generalize from their findings. It is perhaps obvious that children with language learning difficulties will be at a disadvantage as the language becomes more abstract, texts become more dense, and the child's limited prior knowledge is put to the test. The complexities of the classroom curriculum and text talk interact with each other and with the child's abilities or disabilities. Children must develop structural sensitivity to text in order to facilitate their memories for, and retention of, new and difficult content. Presenting students with explicit instructions and feedback about how to make text-based inferences may help them understand how to integrate what they remember and understand about a topic with what the text actually "says."

It is safe to say that many normally achieving youngsters have difficulty when it comes to producing written text. It is even safer to say that children with language learning disabilities may have even greater problems in producing written text. On the average, learning disabled tenth graders write at approximately a fifth to sixth grade level or sometimes even less. Their written efforts reflect their difficulty with spelling, syntax, grammar, and semantics. These efforts are often brief and reflect an inability to organize the information they do have. Again we can see the influence of the classroom. Children's writing reflects their classroom experiences (whether traditional, literature-based, or mastery learning), mirroring their print experiences. They appear to be hostage to earlier school experiences with instruction in various models for the teaching of reading and writing.

In the past, school writing was largely confined to the evaluation of learning. Teachers used writing to assign grades and measure the retention of knowledge in the content areas. Earlier research has shown that children typically are required to write only briefly, i.e., words, phrases, and single sentences, with longer texts being only minimally required and/or practiced. Over the recent past, however, some classrooms have moved toward more individualized efforts, including such activities as the keeping of dialogue journals and in-class writing of narrative and expository text. Teachers have asked students to maintain portfolios where written work as well as drawings and diagrams serve as samples of students' growth in successive revisions of written work. Currently at issue is how text level characteristics (e.g. genre, organization, and length) interact with the language learning constraints of students who find grade-level writing tasks to be beyond their ability.

Fortunately, language professionals are beginning to find new ways of assessing discourse strengths (in addition to weaknesses) and to teach language learning disabled youngsters to more effectively manage the language of the curriculum. The final section of this paper introduces the concept of clinical discourse and its usefulness in assisting children to navigate the highways and byways of the communication requirements of the classroom context.

Clinical Talk

How teachers and clinicians talk to children, ask questions, and evaluate answers (through the IRFs/IREs noted earlier) has much to do with how well children respond to the language of the classroom. The teaching register, also cited earlier in this chapter, focused upon a directive type of discourse scaffolding. That is, teachers saw their primary role as querying and evaluating students' knowledge in accordance with classroom expectations of what is accurate and appropriate. This kind of teaching register places an emphasis on teacher questions and student responses. It also tends to limit student initiation of new topics of conversation. In this case, the teacher or the clinician assumes the responsibility for what the student may be learning.

There is, however, another register, known as the supportive register, that provides an opportunity for students to become an active participant in the conversations of the classroom. In using the supportive register, the teacher assumes a facilitative role, whereby students are offered guidance and the teacher models new or different ways of approaching learning tasks. For example, students are provided with increased opportunities for collaboration between teacher or clinician, and there is a gradual transfer to the student of the responsibility of mastering the curriculum. Teachers and clinicians make explicit the goals and purposes of the learning tasks and make sure that students understand those tasks. They teach children metacomprehension strategies, e.g., how to summarize, generate questions, and clarify and predict. They also are careful to systematically direct children's attention to message elements that may require further explanation. Teachers examine their own teacher talk, child talk, and text talk to determine the communicative intent of each. They use this information to provide scaffolding appropriate to the child's language and learning needs.

A form of scaffolding is called reciprocal teaching, which focuses on the teaching of the four metacomprehension strategies identified above. Such scaf-

folding has been described as the guidance provided by an adult (teacher/clinician or aide) or by a peer (another student) through verbal communication in an attempt to help the student accomplish learning tasks that the student cannot do "on his own" and without assistance. Discourse scaffolding requires considerable knowledge about the language of speaking, reading, and writing as well as what some people refer to as the zone of instructional sensitivity. This concept is thought to be derived from Vygotsky's early writings on the zone of proximal development or ZPD. Vygotsky maintained that a child's developmental level could only be understood by considering both the actual level of development and the potential level of development. He noted that one could only determine the child's potential for independent problem solving by measuring how a child problem solves under adult guidance or in collaboration with "more capable" peers. While there is a need for further research in the use of scaffolding for assessment, intervention, and instructional purposes, current work is encouraging. It provides an avenue for looking at the social context in which discourse and literacy should be nurtured, i.e., the social structure of the classroom.

Summary

Children with language learning disabilities have difficulty in traversing the language continuum. Frequently, the preschool period reveals some indication that reading and writing problems may occur following school entry. Research on early language acquisition continues, and early assessment and intervention may prove helpful now and in the future. The learning of oral language tends to precede reading and writing, but evidence is mounting that emerging literacy skills in the preschool years may be predictive of early school age performance. Access to print means access to academic language. The power of spoken language joins with the power of print relatively early in the child's life. The primacy of printed language overrides the primacy of oral language at certain times and in certain situations. Technically speaking, both oral and literate styles are used in spoken and written language depending on the communicative situation. For children who are at ease with spoken and written language, the acquisition of learning is facilitated. However, for children who have spoken or written language difficulties, the tasks leading to literacy may seem to provide insurmountable challenges. In this chapter, the reader has found brief reviews of some of the major aspects of child talk, teacher talk, text talk, and clinical talk. Each of these topics reflects the interactional context in which children learn language and then use language to learn. Each plays a part in the twin tasks of childhood, either hindering or helping the LLD child.

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CHAPTER 7

Math: Identifying Problems and Effective Management Strategies

JOYCE STEEVES

Arithmetic is where the answer is right and everything is nice, and you can look out of the window and see the blue sky,
Or the answer is wrong and you have to start all over and try again and see how it comes out this time.

—Carl Sandburg

Introduction

The above quotation from Carl Sandburg springs to my mind each time I am brought face to face with yet another dyslexic child who is "failing math." These students, despite hard work involving almost superhuman effort, are without the joy of achievement, the thrill of discovery, and the enthusiasm for creative endeavor which is their right as intelligent children. They exist in a technological world which they understand, but in which, for the most part, they cannot function efficiently.

Many dyslexic students have difficulty achieving in mathematics in a fashion which is commensurate with their intelligence. In some, the breakdowns occur in written output, but it is not clear whether the thinking or comprehension is also impaired; for others more subtle differences may account for a lack of mastery of skills and even concepts, and only skilled observation and diagnosis can lead to appropriate mathematics instruction.

Assessment

The necessity for assessment is two-fold: it is used either for placement or diagnosis. Testing for placement usually takes place in a school where the authorities

mandate which criterion-referenced tests will be used. Such instruments are usually orchestrated around basic skills, grade level achievement, or a certain area of the mathematics curriculum (e.g. Algebra I). Each test comes with a manual to explain its administration and scoring, as well as the interpretation of results.

Diagnostic testing is most often administered on an individual basis, and is based on teacher preference, basic arithmetic, or previously reported difficulties. When assessing the mathematical abilities of students with learning disabilities it is important to realize that no diagnosis has any true meaning unless it will be used to guide future instruction for the individual. The problem with this is that finding out what a child cannot do does not inform the teacher or tutor how he learns or how to teach him. The first thing an examiner needs to find out in order to share with a good mathematics tutor is what ***potential*** the child has for the learning of mathematics. Without this knowledge any planned program of instruction may be totally inappropriate. A second requirement is the opportunity to examine what the student already ***knows*** about different aspects of mathematics. Third, it is important to investigate how a student ***performs*** under timed and possibly stressful conditions.

Assessing potential

Among students with learning difficulties in mathematics there is usually little relationship between achievement and intelligence because achievement in school is based on factors which often have little to do with native intelligence, such as neatness, quantity and quality of written work, and scores on tests. None of these indicates a child's ability to think or solve problems. Since many students in this situation also have difficulty with reading, tests which require the student to read information before answering questions are also not true indicators of ability in mathematics. The following are suggested tests for assessing the true mathematical ability of children having difficulties in math:

Raven's Standard Progressive Matrices (Raven J.C. updated version, 1979)

Test of Mathematical Abilities (Brown & Mc Entire, 1984)

Wide Range Achievement Test (Arithmetic, Level I and II, 1978)

Raven's Standard Progressive Matrices is a series of puzzle–like nonverbal problems which includes a power test of abstract reasoning and logical thinking. There are sixty items in five sets, and the subject is told he may take as long as he needs to complete the tasks, so that there is no pressure of time. The examiner explains the process and completes the first two examples with the student, being careful to tell the student that this is not a "test" but a way of finding out how people think differently. The matrices are usually held to be indicative of an ability to see patterns and follow logical sequences, both of which are essential to the understanding and enjoyment of mathematics. Piaget (Keating, 1976) recognized it as an "outstanding example of a test of multiplicative classification," and Keating, himself, describes it as " designed as a nonverbal measure of general intelligence . . . it is an excellent test of abstract reasoning ability. If a child performs at the fiftieth percentile, he performs better than 50 per cent of his age peers, so he should be able to do as well in mathematics as at least the average student of the same age.

Assessing Mathematical Knowledge

Although there are many tests favored by school systems and examiners, most define what the student knows or does not know about mathematical content. They give an objective score, but need expert analysis before being useful as an aid to planning instruction for individuals.

TOMA is a test of mathematical abilities which gives information about more than just a student's computational potential. Recent advances in mathematics education suggest that other factors than performance are important both in the assessment of abilities and disabilities and in the design of instruction. The Test of Mathematical Abilities (TOMA) has been developed for use in grades three through twelve not only to provide information about two major skill areas in which students generally experience difficulty—*story problems* and *computation*—but also to provide related information about *attitude*, *vocabulary*, and *general cultural application of information*. The various subtests are helpful in diagnosing difficulties in mathematics.

Attitude toward math: The word "attitude" in testing has a different meaning from attitude in other contexts. This subtest answers questions about the student's expressed attitude towards mathematics, through an "agree/disagree/don't know" format. A less than average score on this subtest appears to indicate that the student does enjoy some aspects of math, but would like to do even better. It indicates the ability to see the use of mathematics in the real world, and whether the student thinks that he needs to learn much more. Children who do not feel they are very successful in a certain content area often believe that their friends do better than they do; this aspect is also addressed in the subtest. A child with a very low score may need some psychological or counseling help as well as tutoring or remediation, whereas a high score points to a fortunate individual whose difficulties have had timely attention, or who has received caring support from parents and teachers and whose self-image is still intact. Individual items are clear indicators of how a child feels about different aspects of mathematics learning.

Vocabulary: The vocabulary subtest of the TOMA consists of twenty items for which the subject must give the definitions, and indicates the student's level of understanding of vocabulary when it is used in a mathematical sense. Although it is not required to administer the vocabulary subtest to students under eleven years of age, it is interesting to do so in some cases, especially where students are described as "highly verbal," and the examiner is interested to see if the apparently superior verbal skills extend to spoken definitions in mathematics. Children with specific language disabilities often find it almost impossible to ably describe any of the required words. High verbal capacity almost seems to inhibit their ability to get to the point succinctly. They develop strategies for talking in a charming way which allow them to cope adequately with many situations, but they are almost totally lacking in the specificity necessary for defining and comprehending mathematical concepts. The language and the reasoning seem to be "rambling." For example, when asked to give briefly the meaning of the word "dozen," one ten-year-old said," Well you could . . . Sometimes I think . . . I don't know if this is mathematical . . . well . . . you could be going to the market . . . and you could be going to buy something . . . and maybe it would be eggs . . ." At this point she was asked directly how ***many eggs*** in a dozen, and was able to answer, "Well . . .

there's twelve," so she did get credit for the answer. When asked the meaning of "ounce," she began, "An ounce . . . well let me see. How could I put this? An ounce . . . O.K. Let's see! Well, the way I can tell people something is by a story. Well, see . . . When a baby is born . . ." This is where the examiner introduced pencil and paper and suggested she write the definition. The written definition was "An ounce is another type of measurement for anything but mostly store–bought products." It was not quite as nebulous, but still shows how this child could easily be passed over in a classroom which values clear and specific responses in mathematics. Memory is also addressed in this subtest as the previously mentioned child evidenced some memory difficulty by saying that she had "done perimeter last year," and she felt she really should remember what it is, but couldn't. (The mnemonic of touching the rim of a drinking glass, then color-coding or underlining the letters r-i-m in the word "perimeter" would have helped this child to retain the word and the concept.)

Computation: The mastery of arithmetic computation is the major goal of most existing mathematics programs, whatever other intentions they might claim. Students who evidence computational facility are rarely referred to as mathematically disabled, but this situation is sometimes misleading. Many students in the early elementary years learn to please the teacher by "pushing numbers around." They succeed in everyday arithmetic without understanding anything of what they are doing, and having no comprehension of the underlying concepts. Later, when concepts as well as written algorithms become more complex, they are in trouble mathematically. A similarly misleading picture develops with students who do not complete math problems. They may have difficulties with closure, dysgraphia, or slow processing where they simply run out of time. This does not mean that their computation is "wrong," and yet it is counted thus in tests. Thirdly, some students who are tutored through their daily lessons rarely have opportunities to demonstrate their abilities in a test situation, and may appear more competent than they are. Test items in computation are valuable in providing a comparative information base about a student. In this written subtest the student completes examples which range from beginning arithmetic through high school algebra and geometry.

General Information: Responses to general information subtests provide clues to a child's alertness to the environment and social/cultural background. They indicate how a child succeeds in understanding the common applications of mathematics not only in the immediate environment but in the wider culture. Children with a specific language difficulty do not learn "through osmosis" or exposure, so they need to be directly taught information which their nondisabled peers acquire and remember indirectly as a result of school/home experiences or from high interest levels in the world at large (Cicci, 1990). This subtest is administered orally to individuals with the examiners writing the score in the space provided. If the student is anxious, the examiner may choose to write down what the child says and score it later. This may also provide further diagnostic information about the child's oral language for later use.

Story Problems

Different kinds of abilities, particularly in language, are required to solve Story Problems, and they provide a rich source of information for supplemental analysis

and diagnosis. Well designed problems require solution through mathematical reasoning as well as computation, but barriers to successful solution include reading, syntax (the understanding of grammatical structures), discriminating between relevant and irrelevant information, and lack of understanding of basic mathematical processes.

A mathematics quotient is derived from the total standard scores on this test which is useful to compare with the Raven's score mentioned above. If they are at similar levels, it can be presumed that the student is not an underachiever at that time.

Wide Range Achievement Test

This test is a ten-minute test of written computational efficiency with, as its title implies, a wide range of mathematical examples to test skills across the school life of the student. The student is told that the test will be timed, and frequently begins to rush and erase wildly, giving a realistic picture of how he performs in similar situations in school. The test score, then, is representative of scores received in tests administered in school.

Interpretation

In order to interpret test results correctly and meaningfully, it is essential that the examiner knows what extrinsic factors to look for during testing. Bley and Thornton (1989) list more than two pages of both visual and auditory deficits, across learning disabilities in perception, memory, integration, and language, all of which affect performance in mathematics. An examiner cannot say why a child gives an incorrect answer if he is unaware of how the child is processing the given information. For example, if told the child cannot multiply, the examiner might think he gets the wrong answer in a multiplication problem because he does not understand the multiplication concept. But if he reads the child's records and talks to his teachers and parents, so realizing that the child has a visual discrimination problem, the examiner will then know to check whether the child is perceiving the numbers and/or operation signs incorrectly. He may be *adding* the *right* numbers correctly, and still getting the *wrong* answer. He may be *multiplying* the *wrong* numbers *correctly* and still getting the *wrong* answer. This child does not need to be retaught multiplication, he needs to develop strategies for discrimination of signs and numbers.

Teacher-made Tests for Assessment

Most learning disabled students are erratic in performance. One day they know and can do what is asked of them; the next day it seems as though it is totally new. This inconsistency of performance is a source of great frustration and annoyance to classroom teachers. Often teachers design tests for their own satisfaction, after teaching a new concept or algorithm. If they give two examples of one kind of problem, the student is quite likely to get one right and one wrong. It is important,

therefore, to give at least three examples, so that the majority will probably indicate mastery or lack of it. Then errors should be analyzed and error patterns sought. The best assessment procedure is to give completed examples and then ask the student to make up some examples for the teacher or a peer to solve. If the children are successful, this is a sure indication that they have understood the example, reflected on it, abstracted all necessary information about format and the underlying concept, and know what they are doing.

Effective Management Strategies

Appropriate Instruction

Overall instruction for learning disabled individuals in mathematics must be multisensory, thorough, cumulative, sequential, and presented in small increments. At all costs teachers and tutors must avoid the kind of teaching which has proven to be ineffective in the past. Bley and Thornton (1989) focus on ten general techniques which are valuable in planning and implementing an appropriate program of instruction, and which have been found to be successful in many programs. These are:

- use visuals and manipulatives to illustrate new and important ideas;
- use visual cueing: boxes, circles, and lines;
- assign fewer problems and minimize or eliminate copying from textbook or board;
- use color code;
- alter, adjust, or reinforce the standard text presentation when this meets a special need;
- allow children to finger trace or use other tactile cues;
- capitalize on patterns and other associations to promote understanding or retention;
- use auditory cueing;
- make samples for students who need them;
- carefully sequence instruction in small steps, with adequate provision for practice and review.

All of these are excellent suggestions and lead to success for some students who have been failing. The many illustrations in this book are a fine resource for remedial teachers. One note of caution must be inserted here, however. Use of the word "allow" when suggesting a particular strategy or technique, (as in "allow children to finger trace") is not helpful in training teachers to work with learning disabled students. As Cicci (1990) states, these children must be directly and appropriately taught *any* technique, and must be carefully monitored to see that it is practiced. "Teach children to finger trace." would be a better instruction. If possible, teachers should involve the child's own body when teaching any strategy, and certainly they should involve movement, so that "muscle memory" is developed as well as the other senses. It should always be remembered that students are ultimately responsible for their own learning so after monitoring, to see that the strategy or technique is being practiced, the teacher must then ***teach self-monitoring*** of the strategy so that it becomes autonomous.

Lesson Plan

Just as effective language therapists and tutors devise a daily lesson plan in language (reading, writing, spelling, etc.) retraining, a similar lesson plan proves successful in mathematics also, and can be adapted for small group and whole class instruction as well as one-on-one individualization. Activities within the lesson should be varied and of brief duration. All the senses should be employed, so that all pathways to the brain are utilized in order to ensure orderly storage of information, which brings about efficient retention and retrieval. A large chart should be displayed to remind the students of the daily components of the lesson. This is helpful as a reminder for beginning activities, and also as a cue for review at the end of the lesson. A suggested format is:

1. **WARM-UP or PRACTICE SHEET** (approximately 5 minutes) to review and form a link with previous learning and to ***ensure success***. This helps the child to focus and is a good starting point. Activities may be either individualized or general but easily evaluated for rapid feedback. Homework may be checked at this point, also, with the students involved in the evaluation.
2. **COUNTING** (approximately 5 minutes) Visual and auditory patterns should be presented to help with discovery of logical progressions. Counting forward aids addition; counting backward reinforces subtraction. Skip counting strengthens memory for multiplication facts, and the reverse for division. Counting should be practiced by all students at age appropriate levels. Numbers should be kept small for young children, but adolescents may learn necessary monetary amounts by counting in fives, tens, twenty-fives, etc. Games such as "Buzz" reinforce multiples. Number lines and hundreds charts give valuable, visual reinforcement and should be readily accessible.
3. **BOARD WORK** (approximately 5 minutes) For the K-3 child this allows muscle movements to be larger and aids memorization through the internalizing of numeral patterns. For the older student it relieves the pressure of permanent error, and enables the teacher to observe error patterns and faulty strategies.
4. **MENTAL ARITHMETIC** (2–3 minutes) Mental agility is highly valued in mathematics. A short time each day should be devoted to solving problems mentally. The dyslexic or the learning disabled child may need to give his answer orally or display it by means of concrete objects, or by holding up a number card. He may feel more comfortable with a pencil in his hand and should be allowed to do this. He is still using his mind to solve problems but may need the visual and kinesthetic stimuli to affirm his thinking. This is an excellent opportunity to practice the neglected skill of using denominate numbers (e.g., 11 hours plus 13 hours).
5. **DISCUSSION - Oral Work** (2–3 minutes) Research has shown that it is essential for children to talk through problems. This may mean attaching meaning to mathematical terminology, brainstorming, or simply discussing the need for learning certain concepts. It is important to keep the time for discussion short, and to announce this beforehand, so as to avoid the tendency to talk rather than to do work in an area of difficulty.
6. **NEW CONCEPT** (approximately 10 minutes) This is the teaching period where a new concept is introduced or a new aspect of previous learning is

reviewed or reinforced. The teaching must be multisensory and integrated (see Figure 1) and teach towards independence. The period is kept brief so that the teacher may demand full attention.

7. **WRITTEN COMPUTATION** (approximately 10 minutes) This must be a period of intensive written practice and concentration. It is the only silent part of the lesson, with no interruptions, so that the children may concentrate and the teacher can observe the students closely to give any necessary help and ensure success.
8. **REVIEW** (approximately 5 minutes) This is an important part of the lesson as it "ties all the ends together" and helps students to remember what they are learning from day to day. One successful strategy in reviewing for most children, but especially for the child with specific language difficulties, is to request that each student (or if the class is large, selected students) tell in one, perfect sentence something learned that day. If the students say they did not learn anything new, they should be asked to give one sentence about something they practiced.

Journal Writing in Math

Many mathematics teachers are developing the excellent practice of journal-writing in math class. This is helpful, at review time, in giving students the opportunity to think through problems, write about attitudes, give explanations, and cement understanding. The dysgraphic student may not benefit from extra writing, but may use the word processing program on a computer, or may tape record his journal for later listening.

Effective Management Strategies

In most of today's classrooms the word management relates to the disciplinary measures needed to promote learning. Lemlech(1979) broadened the definition to:

> . . . the orchestration of classroom life: planning curriculum, organizing procedures and resources, arranging the environment to maximize efficiency, monitoring student progress, anticipating potential problems. (Lemlech, 1979, p. 5)

In structuring an appropriate program for dyslexic youngsters all of the above aspects need to be addressed, but in special ways which promote suitable methodology, time on task, and success in learning and performance. The orchestration of the classroom is just as important for mathematics as for any other content area, and perhaps more so. It requires a great deal of expertise, not only in knowledge of the content to be learned, but in knowledge of the learners and how they learn best, of the difficulties, and how to ameliorate and remediate them. In addition, effective pedagogy in math requires enthusiasm for the subject matter, the ability to couple this with astute assessment of each child's capacities and needs, and skill in teaching each one in his/her own style and pace, whether individually or in varying groups.

Model

Figure 1 describes the integration of teaching special students, from the introduction of new concepts through manipulatives and movement and two-way teacher input—visual and auditory stimuli reinforced by language, and language reinforced by auditory and visual stimuli. Thus the teacher integrates the teaching, so that efficient output, both written and spoken, becomes not only possible, but enjoyable for students. The tetrahedron describes the learning needs of the students, with the base representing the concrete level of learning, using manipula-

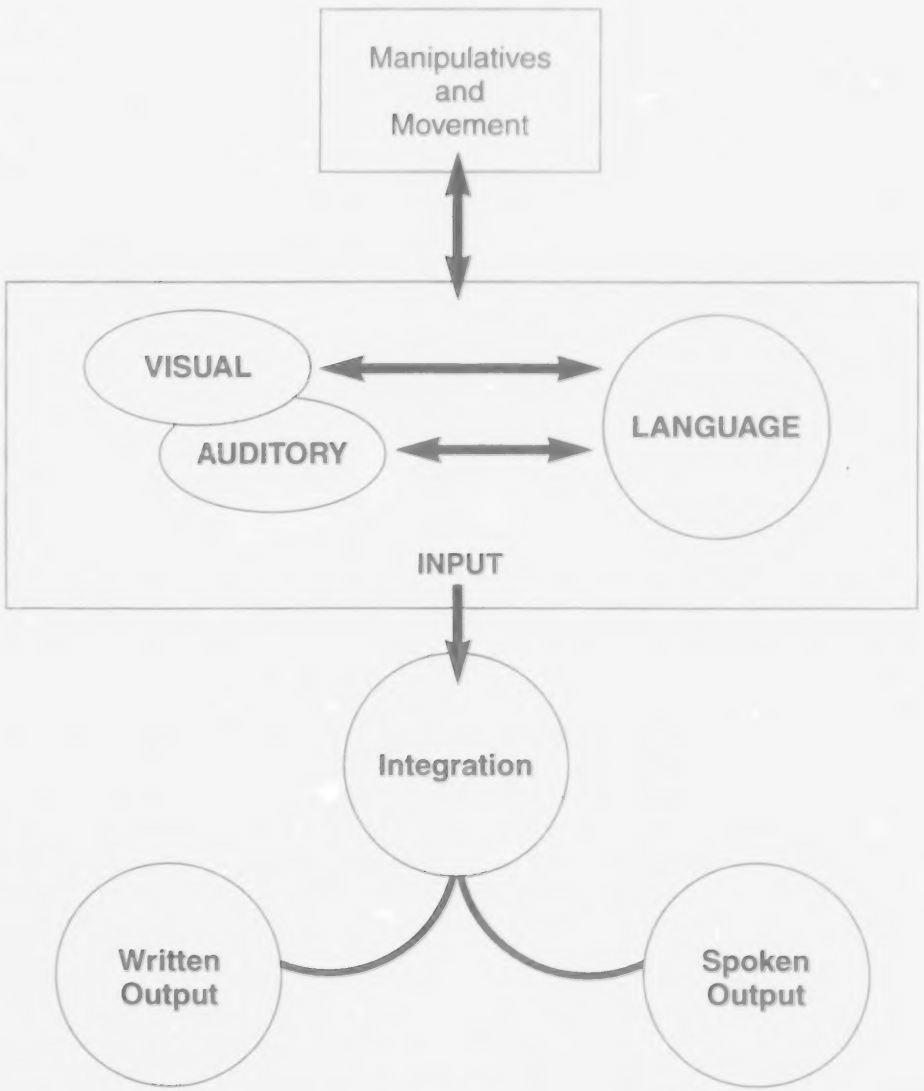
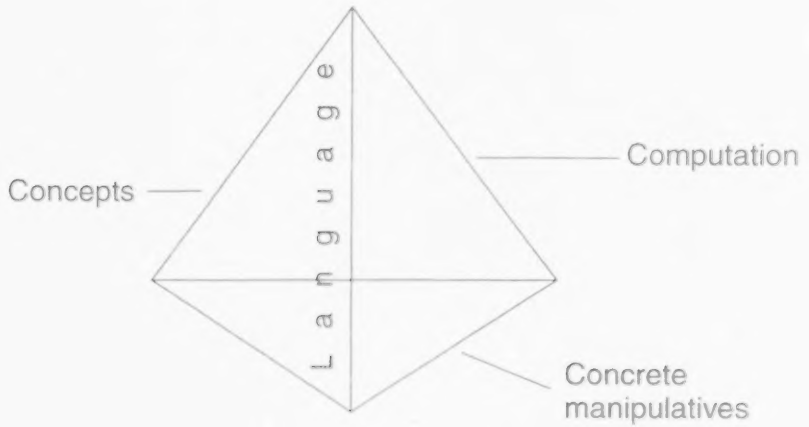


FIGURE 1
Introduction of New Concepts

tives and movement. One face is arithmetic, with rote learning and memory training for facts; one face is multisensory learning of concepts, and the fourth face is language, as important as and having the same dimensions as the others.



Whichever face is turned upward is the important one at the time, but all are linked together and equally necessary.

Managing Instruction

Two general approaches to the teaching/learning of mathematics have been identified, each having significant management implications: Structured Direct-Instruction and Discovery Learning. Although all instructional approaches vary as they are implemented by individual teachers (McEntire, 1984) the most appropriate method for the learning disabled student seems to be a blend of the two. All the manipulatives in the world are not going to teach the relationships between the concept, the written algorithm, and the application of new learning. Nevertheless, all students need time to explore the materials, record in some way what they have found, then be directly instructed in the written algorithms and the connections to the concepts.

The Active Teaching Model

The Active Teaching Model (Kutz, 1991) comes very close to the kind of model which could be made appropriate for teaching the learning disabled. It is divided into four parts and encompasses the necessary components of a thorough lesson plan. Again, its implementation probably depends on the individual teacher, but it has the basis for providing successful learning.

The Active Teaching Model

Daily Review

1. Review
2. Homework
3. Mental Computation

Development

1. Advance Organizer
2. Review of Prerequisites
3. Develop Material
4. Assess Comprehension
5. Repeat as Needed

Seatwork

Homework

Special Reviews

1. Weekly Review
2. Monthly Review

Organizing Materials and Resources

Consistency and order are important in the education of learning disabled children. Work spaces should be well-organized with a wide range of resources classified, labeled, and ready to hand out so that children can easily select what they require without constant reference to the teacher. The floor space and furniture arrangements should allow for different tasks. Practice sheets for when the students begin the math period should be consistently in the same place so that they may help themselves rather than waiting for the teacher to distribute them. A good practice for many classes has been to practice addition on Monday, subtraction on Tuesday, multiplication on Wednesday, division on Thursday, and a "fun" page on Friday.

Using different colored sheets may also help students to remember what day it is, and to guard against perseveration. Some children may simply add all week long without the structure provided by the teacher.

Environment

Students' learning of mathematics is greatly assisted by the provision of a stimulating yet caring classroom environment. Cooperative learning groups are sometimes appropriate for learning disabled students because they provide students with opportunities to talk about and exchange ideas and listen to their peers. Small group work encourages independence and responsibility, as well as developing the ability to communicate and reason. Many studies of cooperative learning groups have reported higher achievement scores and a more positive attitude to learning, but the teacher must be aware of social and behavioral ramifications, selecting the groups, and structuring the activities carefully.

Interpersonal Communication

Teachers who demonstrate an appreciation for their subject and their students through their behavior and instruction promote learning in mathematics because children who have positive feelings about math exert more effort, spend more time on task, and are more effective learners. Direct teaching of courtesy and consideration are a must in classrooms which cater to students with learning disabilities. Not all of them have behavioral problems, but often they are unable to read facial expressions and body language, and even misunderstand the spoken word. Role playing social occasions such as "going to the store" and having lunch together is extremely valuable in learning mathematics for real life.

Calculators and Computers

As a response to the call for reform in the teaching and learning of mathematics, the National Council of Teachers of Mathematics took action as long ago as 1989 by publishing the volume of New Standards for Curriculum and Evaluation in Mathematics. This piece was carefully prepared by the Working Groups of the Commission on Standards for School Mathematics over two years so that all students, including the disabled, may be given the opportunity to learn mathematics addressing their future needs and relating to real life situations. Fortunately, the Standards represent a bold shift away from the traditional teaching of mathematics, and those of us involved in teacher training applaud this timely divergence. Unfortunately, the very differences in suggested strategies and techniques have caused schools and local school systems to be slow in adopting the guidelines. For many, it is still easier to "teach the book" than to teach the child. Four standards are common to all grade levels in this 256 page document which seeks to ensure "math literacy" for all students: communication, reasoning, problem-solving, and mathematical connections.

Since the need for revision of mathematics teaching across the nation is so apparent, those of us who work in the field of special education must strive even harder to ensure that ***all*** children are provided with the unparalleled opportunity to learn needed mathematical skills and develop an understanding of mathematical processes. The Standards demand that calculators are available at all times and computers whenever they are needed for demonstration or problem-solving.

We live in a technological society, and it is incumbent upon all in education to give children the opportunity to become fully functioning citizens. Two of the tools of the age in which we live are calculators and computers. Long gone are the days when teachers were afraid that if students used these tools they would never learn their multiplication tables. The tools are here to stay and must be integrated into the curriculum. They will never replace good teaching, however, for computers do not teach; teachers do. The learning disabled students still need direct instruction in how to make the best use of the tools for problem-solving and data handling, but, properly handled, these technological aids can be the equalizers they were planned to be years ago. This quote from The New Standards for Curriculum and Evaluation in School Mathematics is a fitting end to this paper:

> *Mathematics has become a critical filter for employment and full participation in our society. We cannot afford to have the majority of our population mathematically illiterate: Equity has become an economic necessity.*

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CHAPTER 8

Making the Connections: Juvenile Justice and Learning Disorders

THE HONORABLE THOMAS P. MCGEE

In my world of juvenile court, two of the most serious issues involved in school failure are:

1. lack of effective parental involvement, and
2. failure of each public school system to implement IDEA, that is, to identify early on the educational needs of children and provide for those needs on an individualized basis.

These issues are so important because they underlie school failure which (in addition to contributing immeasurably to misery for children) ultimately results in the social and occupational maladaptation of our future citizens. This maladapted person thus becomes an economic and social burden to our society rather than an asset.

The solutions to these ills are neither clear nor short-term. There is no quick fix, no "seven-second sound bite." As a nation we must attempt to employ wisdom rather than just react expediently. Acquiring wisdom is a long process. Expedience usually produces token results.

In my view, based on my eighteen years on the bench and ten years as a prosecutor, I believe that our nation must develop a system of economic and social sanctions and rewards to encourage parents to bring healthy babies into the world and take reasonably good care of them which includes providing a reasonably good education. The phenomenon of the Fetal Alcohol/Drug Syndrome that causes irreversible neurological damage is a scourge.

Second, we must have a system that encourages good quality early childhood development to reduce "environmental" damage to our children. Such a system must include early childhood educational evaluations and individualized instruction.

In juvenile court, we are confronted with the result of our society's failure to

encourage parents to address good prenatal care and early childhood development. Studies have proven again and again the link between school failure (learning disabilities in particular) and delinquent behavior. Undiagnosed, unevaluated, untreated children with learning disabilities are twice as prevalent in court as in the population at large.

The link study done by Noel Dunivant, et al, in 1981, shows school failure as a major cause of delinquency. The kids one sees in juvenile court are impoverished in many ways. Most appear without fathers. Their parent is usually an overburdened, ill-functioning mother. They come from chaotic families.

McDonald Critchley in "Reading Retardation, Dyslexia and Delinquency" (*Journal of Psychiatry*, Vol. 15, 1968) finds that "school failure was more closely correlated with delinquency than were poverty, broken homes, physical and mental defects, or psychopathic conditions."

A 1970 White House conference on children also reported "most reform school inmates are one to five years behind their age grade academically."

Sikorski (*1991 Psychiatric Annals*, Vol. 21, p. 742) says in citing several studies: "A significant and consistent finding has been that these learning disabled youth are seen in alarming numbers in the juvenile justice systems and adult correctional institutions."

Noel Dunivant, in the "Executive Summary of the Relationship Between Learning Disabilities and Juvenile Delinquency," says:

> There was convincing evidence that learning disabilities were associated with increases in delinquent activities and official contracts with the juvenile justice system. . . . The findings indicated that the relationship is quite complex, reflecting such factors as school failure, susceptibility, and differential arrest and adjudication. . . . The findings demonstrate that adolescents handicapped with learning disabilities are a relatively high-risk group for delinquency.

Since 1984 we in the juvenile justice system, through the efforts of the National Council of Juvenile and Family Court Judges, with grants from the Foundation for Children with Learning Disabilities (predecessor to the National Center for Learning Disabilities) have been educating judges and other juvenile justice professionals about school failure and some of its causes and possible remedies. More of this education must be done, and the National Council intends to continue its endeavors in this regard when further funding is available.

The Dunivant study shows remediation effective to reduce recidivism rates.

> In sum, the threshold analyses indicated that remediation consisting of at least 40 to 50 hours of instruction was significantly effective in preventing or controlling future delinquency. . . . The results suggest that the major factor determining the success of the program in preventing delinquency was not academic school improvement per se. It seems most plausible that the beneficial effects of remediation were due to the nature of the relationship between the adolescents and the learning disabilities specialist. . . . Remediation may have been precisely the kind of situation that was needed to facilitate socialization and attachment, e.g., one in which motivation was aroused, concern demonstrated, traits and values modeled, etc.

Remediation, though, is too little, too late. All of us in our field agree that by the time we see these kids in our courts either as delinquents, runaways, ungovernables, truants, drug addicts, or abused and neglected kids, the damage has been done, and we are only reacting as best we can to the problems. It is important to react responsibly, and there are things we can do, but this does not get at the root of the problems. As a nation we seem to prefer to react to the problems rather than prevent them when possible.

Successful systematic changes are made when private and broadly based public education efforts combine to awaken the public. Statistics on the reduction in cigarette smoking over the past several years bear this out. We came from a nation of 52% smokers to 26%, but it took 25 years of effective public and private endeavors. Good prenatal care and early childhood development and education will go a long way to reducing the problems we have to deal with in the juvenile and adult criminal justice systems. As the saying goes, "you pay me now or pay me later."

Almost all kids we see in the juvenile justice system have several things in common:

1. a dysfunctional, chaotic, and nonsupportive family;
2. a history of educational failure (usually due to lack of parental involvement together with the failure of a public educational system to implement the law of the land, IDEA); and
3. a poor self-image which is a product of school failure and lack of parental involvement. Lack of positive self-image typically leads to other social and medical problems, such as drug and alcohol abuse and lack of ability to acquire employable skills.

We do not need more laws. IDEA, it seems to me, provides the necessary law to accomplish good quality public education. However, it has been my experience that nationwide the provisions of IDEA are not being fully, fairly, and appropriately implemented. Our public school systems are not providing early identification and evaluation of all children across the board (including learning disabled kids). Labels are used and misused as resources are available or lacking. "Emotionally disturbed" is an increasingly popular label for learning disabled children. In fact, one study done by Pat Hardman of the Dyslexia Research Institute at Woodland Hall Academy in Tallahassee, Florida, has shown that a child reaching the twelfth grade will have come in contact with an average of five "emotionally disturbed" teachers!

Public schools are not providing the individualized education IDEA calls for. We have a public education system that does not accept variation in abilities or learning styles. There is very little diversity in our public educational system. They are oriented to serve the "large university-qualified student" which, in reality, may be only 20% of our nation's students. What about all of the other students, including special needs students such as those with learning disabilities?

As a result of the failure of our public educational system to truly implement IDEA, we have a drop-out rate before high school graduation at a high of 40% in the state of Louisiana, and a low of 18% in Minnesota. We in the juvenile justice system see this 40% every day. In other words, we are seeing a business (the public education system) that is operating at a questionable 60% efficiency. Of the 60% who graduate, it is estimated that only 20% can read and write at a college level. A

private business operating at that rate would have to fold. There must be some accountability here. The sad part of this is we have some very dedicated knowledgeable educators in our public schools who know what we need. Their voices simply don't seem to be heard. How do we get this train on the right track?

CHAPTER 9

Intrinsic, Extrinsic, and Educational Influences that Predispose a Child to Anomalous Development of Prosocial Behavior

G. EMERSON DICKMAN

This chapter examines the link between learning disabilities and antisocial behavior. A hypothesis is offered which suggests that subtypes of learning disabilities vary significantly in the severity of risk or predisposition to the development of antisocial behavior, and that such risk is enhanced in the presence of comorbidity and/or environmental factors such as school failure, low socioeconomic status, and adopted child status. It is argued that such risk is not properly addressed due to fundamental weaknesses in our system of special education that precludes effective intervention.

Link between learning disabilities and delinquent behavior

"Yes." "No." "Maybe." These are the answers to be found in the research seeking to establish the existence of a link between learning disabilities and antisocial behavior. There are studies that support a strong correlation (Wilgosh and Paitich, 1982)[1], others that support a modest correlation (Lane, 1980), and some that indicate no correlation (Cornwell and Bawden, 1992; Spreen, 1981; Broder, Dunivant, Smith, and Sutton, 1981). Other studies indicate that people react differently to a child with learning disabilities than they do to a child without learning disabilities. Such studies indicate that learning disabilities (LD) are not linked to the behavior, but to the fact that persons with learning disabilities receive differential treatment and are, therefore, more likely to be taken into custody (Thompson, 1985), to be found delinquent by a juvenile court (Broder, Dunivant, Smith and Sutton, 1981), or to get more severe penalties (Spreen, 1981).

[1]Many of the studies supporting a strong correlation are retrospective, preselecting a delinquent population and investigating for evidence of a learning disability.

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When persons with learning disabilities get into trouble, the same deficits in language and pragmatics that lead to academic difficulty interfere with their ability to explain themselves and present a sympathetic posture. Many children with learning disabilities, in the face of an accusation, look guilty, act guilty, and can't articulate satisfactory explanations.

The inconsistency found in these studies is more a result of a lack of comparable cohorts across studies than it is of poor methodologies within studies. To get consistent generalizeable data, research must be done with a similar population across studies. If research attempts to determine the link between balls and broken windows, it matters if the study is limited to golf balls, basketballs, or baseballs. Byron Rourke (1988) referred to such studies as addressing "undifferentiated" groups of learning disabilities. For instance, those studies which identified the LD population using indices of reading proficiency (Cornwell and Bawden, 1992), or proficiency in academic subjects requiring reading proficiency (Rhodes and Reiss, 1969) identify an LD population that is psycholinquistically involved in terms of left hemisphere weaknesses (Pennington, 1991). Such a person is not at significant risk for delinquent behavior (Rourke, 1988); rather, due to weak auditory processing skills (Harnadek and Rourke, 1994), that person may very well have more difficulty dealing with the communications demands of an apprehending officer or a judge, which may help explain the differential treatment hypothesis of Thompson (1985), Spreen (1981), and Broder, et al, (1981).

Studies of adjudicated youth that identify LD by relying on evidence of previously recorded diagnosis (Broder, et al, 1981)) or that rule out emotional disturbance (ED) (Broder, et al, 1981) fail to recognize the fact that the Nonverbal Learning Disability (NLD) subtype does not experience early academic failure sufficient enough to be identified as LD (Semrud-Clikeman and Hynd, 1991).[2] Emotional problems often develop as a result of the failure to identify earlier the underlying LD. Thus, studies that rely on previous school diagnosis or absence of ED also over-identify their LD population with left hemisphere, language-based deficiencies. Furthermore, studies that evaluate the already adjudicated without reference to previous history rely primarily on the existence of a significant discrepancy between aptitude and achievement (Wilgosh and Paitich, 1982)—a formula for identification and diagnosis of LD that has been universally discredited (Mather and Healy, 1990; Shaywitz, Fletcher and Shaywitz, 1994b).

Commenting on the inconsistent results of studies addressing the co-occurence of ADHD and LD, Shaywitz, Fletcher and Shaywitz (1994b) stated that:

> Examination of both the methods and the results of these studies are instructive . . . in fact each used a somewhat different definition - a methodological inconsistency that speaks to the current lack of a single universally accepted criterion for the diagnosis of either LD or ADHD.

Consistent results are not obtainable across studies if one observes baseballs and another observes basketballs. Further, research cannot accurately predict how a golf ball will act by studying baseballs and basketballs.

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[2]"One might also assume that this disability may be present early in development but may not necessarily be recognized until the child . . . moves into the age range in middle childhood where peers and peer relationships become more crucial." (Semrud-Clikeman and Hynd, 1990).

LD Subtypes

The inconsistency observed in studies addressing the link between LD and delinquent behavior is of heuristic value in that it supports the existence of subtypes of LD, each having a different risk factor for delinquent behavior. In other words, if the inconsistent results among the studies are due to differences in the characteristics of the LD cohorts being researched, the conclusion is not that the studies are invalid, but that the characteristics of the particular cohorts being researched are a significant determinant in evaluating the link between LD and delinquent behavior. Thus, if nothing else, these studies prove that among the "ball" population there are different types, each with a unique set of characteristics. It's not surprising, therefore, that a study of the link between broken windows and balls finds no link when using basketballs and a significant link when using baseballs.

For the purpose of illustrating the hypothesis offered in this article, four possible subtypes of learning disabilities are briefly addressed: **1.** Nonverbal Learning Disability, **2.** Dyslexia, **3.** Attention Deficit/Hyperactivity Disorder, and **4.** Executive Function Deficit.[3]

1. Nonverbal Learning Disability

As early as 1968, Myklebust (1968, 1975) suggested the possibility of a "nonverbal" learning disabilities subtype who exhibits "deficits in . . . interpersonal relationships (ability to judge the emotion being expressed by other people)."

> The NLD syndrome leads to a distinct pattern of difficulty in . . . socioemotional functioning (Rourke, Yung, and Leenaars, 1989). (Little, 1993).
>
> Children who are unable to acquire these skills because of difficulty in evaluating facial expressions, gestures, or prosody would be at high risk for the development of significant learning difficulties in, at the very least, the social-emotional arena of competence. (Semrud-Clikeman, and Hynd, 1990).

Although there appears to be a consensus among the many researchers and authors addressing the phenotype, there is no consensus as to a name for the syndrome.[4] The most recent and most authoritative work in the field is that of Harnadek and Rourke (1994), who present a comprehensive model of a Nonverbal Learning Disability (NLD) subtype. Their research indicates that the NLD subtype

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[3]The subtypes of LD chosen to be discussed in this article are intended to be illustrative of the concept of subtyping, and the author does not intend to indicate that the phenotypes chosen are either exhaustive of the LD subtypes that exist, or indeed, valid subtypes in and of themselves, e.g., ADHD may consist of several subtypes which may or may not include components of the EF and NLD subtypes discussed herein.

[4]This author has reviewed articles using eleven titles: 1. Right Hemisphere Dysfunction; 2. Nonverbal Learning Disability; 3. Semantic-Pragmatic Learning Disability; 4. Nonverbal Right Hemisphere Learning Disability; 5. Social Communications Spectrum Disorder; 6. Social Perception Disability; 7. Nonverbal Perceptual Organization Output Disability; 8. Left Hemisyndrome; 9. Right Parietal Lobe Classification; 10. Nonverbal Social Learning Difficulties; 11. Social-Emotional Learning Disability.

evidences "socioemotional/adaptive deficits" including compromised "social competence" and "emotional stability."

2. *Dyslexia*

Harnadek and Rourke (1994) convincingly distinguish the NLD subtype from their R-S (Reading-Spelling) subtype which closely matches the LD construct often referred to as Dyslexia.[5] Pennington (1991) indicates that the primary symptoms in dyslexia include "problems in reading and spelling; a problem in the phonological coding of written language." Harnadek and Rourke (1994) describe their Group R-S as having "very poor reading and spelling skills" and "relatively poor psycholinguistic skills."[6] Interestingly, the literature is replete with indications that the dyslexic learner may also exhibit unexpected strengths (Masland, 1972; West, 1991). Harnadek and Rourke (1994) credit the Group R-S with "very well-developed abilities in visual-spatial-organizational, tactile-perceptual, psychomotor, and nonverbal problem solving areas."

3. *Attention Deficit/Hyperactivity Disorder*

The criteria for diagnosing ADHD has recently been revised in the DSM-IV.[7] Someone who fidgets, forgets, doesn't listen, is distractible, talks too much, doesn't wait his turn, and interrupts is clearly unlikely to have a large circle of good friends. Shaywitz, Fletcher, and Shaywitz (1994b) authoritatively challenge the predictive and communicative power of current methods for diagnosing ADHD. They convincingly argue that there is evidence for at least two subtypes - behavioral and cognitive. Two children with two different etiologies requiring two different treatment approaches can be diagnosed as ADHD. The significance of this argument lies in the fact that each subtype presents a different socioemotional risk profile.[8] The inability to identify "the diverse populations now diagnosed as

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[5]Defintion of dyslexia adopted by the Research Committee of the Orton Dyslexia Society (1994):

> Dyslexia is one of the several distinct learning disabilities. It is a specific language-based disorder of constitutional origin characterized by difficulties in single word decoding, usually reflecting insufficient phonological processing abilities. These difficulties in single word decoding are often unexpected in relation to age and other cognitive and academic abilities; they are not the result of generalized developmental delay or sensory impairment. Dyslexia is manifested by variable difficulty with different forms of language, often including, in addition to reading problems, a conspicuous problem with acquiring proficiency in writing and spelling.

[6]Ongoing authoritative research on this subtype is being conducted by Joseph Torgeson in Florida (Torgeson, Wagner, and Rashotte, 1994).

[7]*Diagnostic and Statistical Manual of Mental Disorders*, fourth edition (DSM-IV; American Psychiatric Association, 1993).

[8]In this author's experience, there is significant overlap in the diagnosis NLD and ADHD-behavioral subtype. In spite of the significance of the distinction, it takes a discerning professional with extensive clinical experience to make an appropriate diagnosis.

ADHD represents a central problem in our ability to understand, assess, and treat affected individuals." (Shaywitz, Fletcher, and Shaywitz, 1994b).

4. *Executive Function Deficit*

Bruce Pennington (1991) was most parsimonious in his description of executive function (EF), which he broadly defined as "the ability to maintain an appropriate problem-solving set for attainment of a future goal." Executive function deficits may include problems with "organizational skills, planning, future-oriented behavior, set-maintenance, self-regulation, selective attention, maintenance of attention or vigilance, inhibition, and even creativity" (Pennington, 1991). Martha Denckla (1994), a leader in exploring executive function, sums up the list of EF components by indicating simply that "executive function refers to attention not only to the present but also to the future, as well as intention (preparedness to act)."[9]

Extrinsic Influences

Factors that may be loosely referred to as "environmental" have also been shown by various studies to have a negative correlation with socioemotional development. Such factors, unrelated to neurobiological profiles, include low socioeconomic status (Grande, 1988), school failure (Rhodes and Reiss, 1969; Grande, 1988), and adopted child status (Dickman, 1992; Brodzinsky and Steiger, 1991). Many studies hypothesize that school maladjustment and academic failure are the cause for the disaffection that results in delinquent behavior (Healy, 1993; Bruck, 1986; Dunevant, 1982; Kolmetz, 1982). In fact, learning disabilities can be the common cause factor having a significant impact on both academic as well as psychosocial development (Rourke, 1988, 1989, Myklebust, 1968).

The hypothesis presented in this paper would anticipate that future research will support the finding that the primary precursor to the antisocial behavior exhibited by the learning disabled has a neurobiological etiology and that extrinsic influences such as socioeconomic status, adopted child status, and academic failure are secondary factors compounding the risk profile.

Comorbidity

> Denckla (1979) provided convincing evidence that the presence of various codiagnoses, including types of language disorder or ADHD with hyperactivity, is meaningfully related to subtypes of childhood learning disabilities. More recent studies have provided further support for the idea that learning disabilities frequently co-occur with other psychiatric disorders. . . . (Semrud-Clikeman and Hynd, 1990).

[9]In this author's experience, there is significant overlap in the diagnosis of EF and ADHD-cognitive subtype. Appropriate diagnosis requires (as in the NLD/ADHD confusion) a discerning professional with extensive clinical experience.

It is academic that one or more of the intrinsic and extrinsic conditions heretofore discussed may co-occur, creating the specter of complicated profiles unique to the individuals, e.g., a child can be dyslexic, ADHD, adopted, and suffer school failure.[10]

Prosocial Development

Researchers interested in the mechanics of normal psychosocial development have determined that prosocial behavior is intimately involved with cognitive growth and the development of perspective-taking and role-taking ability (Moore and Underwood, 1981).

> Although the ability to anticipate the cognition of another may be a more complex cognitive feat than the ability to recognize different visual perspectives, they are usually assumed to generate from a common basis (Moore and Underwood, 1981).
>
> This basic construct was examined in a 1980 study by Underwood, Froming, and Guarijuata (1980) using the three-mountain task. In this task, a child is placed before a model of a mountain scene and is asked to imagine what would be seen if the child were placed at some other position. The child is asked to choose which of several photographs accurately represent the view from the alternative position.
>
> The . . . children . . . were given 25 pennies when they entered the experimental room, ostensibly for helping the experimenters with their work. Following completion of the three-mountain task, the children were given an opportunity to donate some of their pennies anonymously to a fund for children who wouldn't get a chance to earn pennies. Perspective taking scores were significantly correlated with the number of pennies donated (Moore and Underwood, 1981).

Although this study was intended to investigate the correlation between the *normal* development of altruism and perspective-taking in children, the conclusions can be related to situations where perspective-taking and role-taking skills do not develop due to neurobiological deficits.

> Empathic reaction is an internal response to cues about the affective states of someone else; the empathic reaction must depend heavily on the actor's cognitive sense of the other as distinct from himself (Moore and Underwood, 1981).

If Rourke's NLD model is used as an example, the person with NLD who has difficulty with "visual attention," "visual memory," "prosody," "semantics," and "pragmatics" (Harnadek and Rourke, 1994) has a significantly impaired ability to interpret the paralinguistic cues (such as body language, facial expression, and

[10]The current fashion of sorting children into separate and distinct diagnostic pigeonholes is a bureaucratic convenience with no scientific or pedagogic merit.

tone of voice) necessary to develop a "cognitive sense of others" (Hoffman, 1975). Therefore, the NLD person is deficient, due to a neurobiological etiology, in both of the fundamental skills, *perspective-taking* and *role-taking*, found to have a significant correlation with the development of normal prosocial behavior.

Interim Conclusions

At this point, there appears to be rather robust support for the following conclusions:

1. learning disabilities consist of various subtypes;
2. each LD subtype poses a unique and variable risk of predisposing a child to anomalous development of prosocial behavior;
3. co-occurence of LD subtypes enhance the risk of evidencing anomalous development of prosocial behavior; and
4. environmental factors, such as school failure, low socioeconomic status, and adopted child status also enhance the risk of evidencing anomalous development of prosocial behavior.

Figure 1 is intended to demonstrate the *possible* relationship of various learning disability subtypes and codiagnoses to a hypothetical risk factor predisposing the child to experiencing anomalous development of prosocial behavior. This table is intended only as a visual representation of an example of what this author would expect if consistent and generalizable studies were to be conducted addressing the link between intrinsic and extrinsic influences to a predisposition for the anomalous development of prosocial behavior.

This table anticipates that each learning disability subtype predisposes a child to a quantitatively different risk for development of behavior problems. For instance:

- Dyslexia (R-S) poses a very low risk;
- Executive Function Deficits (EF) poses a slightly higher risk;
- Attention Deficit Disorder (ADHD) poses an even higher risk; and
- Nonverbal Learning Disability (NLD) poses the greatest risk.

If children with NLD display relative "proficiencies in reading (word recognition) and spelling" (Harnadek and Rourke, 1994) as opposed to dyslexics who have "problems reading . . . and spelling" (Shaywitz, Fletcher, and Shaywitz, 1994a) it is logical that prospective studies of dyslexics find little or no link to delinquent behavior and that retrospective studies of delinquent populations find a significant link between delinquent behavior and learning disabilities. Obviously, the prospective study is observing one LD subtype and the retrospective study is observing a different LD subtype. (A study of basketballs shows an **insignifigant link** between balls and broken windows. A study of baseballs shows a **signifigant link** between broken windows and balls.) Dr. Rourke's research involving 750 children with learning disabilities supports his conclusion that "the better the reading the more serious the psychopathology" (Rourke, 1993). The inference is clear, i.e., **a significant risk for anomalous prosocial development is**

FIGURE 1

Disability Profile	*Enhanced Risk Predisposition for Antisocial Behavior*	*School Failure*	*Low Socioeconomic Status*	*Adopted Child Status*
No LD Profile	0	+1	+2	+1
R-S	2	+1	+2	+1
EF	3	+1	+2	+1
R-S/EF	4	+1	+2	+1
ADHD	5	+1	+2	+1
R-S/ADHD	6	+1	+2	+1
ADHD/EF	7	+1	+2	+1
R-S/ADHD/EF	8	+1	+2	+1
NLD	9	+1	+2	+1
NLD/R-S	10	+1	+2	+1
NLD/EF	11	+1	+2	+1
NLD/EF/R-S	12	+1	+2	+1
NLD/ADHD	13	+1	+2	+1
NLD/ADHD/R-S	14	+1	+2	+1
NLD/EF/ADHD	15	+1	+2	+1
NLD/EF/ADHD/R-S	16	+1	+2	+1

R-S Psycholinguistic/Dyslexic profile
EF Executive Function profile
ADHD Attention Deficit/Hyperactivity Disorder profile
NLD Nonverbal Learning Disability profile

Scale 0 to 20 with 0 being normal risk

not common to all LD subtypes. Dr. Rourke (1993) also describes the NLD child as having a "modality specific attention deficit" in that they do not pay attention to **visual and tactile** stimulation while the dyslexics do not pay attention to **auditory** stimulation. Could there be a better argument for the need to subtype learning disabilities and individualize intervention and remediation?

> "One wonders if the real progress will not come from disentangling groups of children from this huge conglomerate mass, rigorously specifying the nature of their difficulties, and systematically exploring appropriate educational interventions for these subgroups" (Doris, 1993).

Systemic Weaknesses

If we know so much about risk, why isn't more being done to avoid the progress of risk toward reality? In large measure, the fault appears to lie in our system of education which evidences intrinsic weaknesses that interfere with the appropriate delivery of services. Three of these intrinsic weaknesses require mention.

1. Schools are required to quantify or establish concrete, measurable growth in student achievement. Pretesting and post-testing is applied to virtually every increment of educational experience in order to quantify measurable growth. This ***quantitative accountability*** causes administrators and teachers to de-emphasize efforts at promoting skills that are not readily quantifiable (e.g., ethics, problem solving, and decision making), as well as strategies for the acquisition of social competencies and nonverbal literacy.
2. A related weakness is the ***slice-of-time perspective*** adopted by educational evaluators. Our current procedure of multidisciplinary evaluation focuses on what *is*, with limited concern for prognosis. Such evaluations are motivated by a desire to establish concrete baselines in order to *quantify* the success of remediation. Possible interventions are overlooked because prognosis is ignored.
3. The aptitude-achievement discrepancy formula used to determine eligibility for special education services is predicated on school failure. This "***threshold of failure***" (Mather, 1994) must be crossed before services can be delivered.

This combination of weaknesses has established a dynamic that ignores the evaluation of "risk." A problem must exist, not merely be possible or even probable, before resources can be devoted to remediation. Our system of education provides greater regards to those who cure than to those who prevent, reversing Ben Franklin's axiom that "an ounce of prevention is worth a pound of cure." Our educational system is hostage to accountability and a slave to vestigial paradigms.

What Will Help?

Recently an eleven–year–old child died while being restrained. A review of this child's records indicated a profile that placed him among those with the highest risk (NLD/EF/ADHD). He was not properly diagnosed,[11] and his needs were not properly evaluated. His environment overlooked the neurobiological etiology of his behavior, thereby missing opportunities for intervention and remediation, and instead implemented a punitive and self-protective response. **Society can better protect itself by recognizing the intrinsic, constitutionally-based, predisposition of some children to develop problematic behavior and by delivering efficacious intervention and remediation.** This example is used to illustrate the seriousness of the issues involved. An educational system that does not respond to the needs of our children does not merely compromise their potential to benefit themselves, their families, and society, but risks causing them to become burdens to their families and society and even risks to themselves.

What can be done?

1. **Research**: Support **studies** to identify and define learning disabilities subtypes (classification studies).

[11]Among many other indicators, this young man had a verbal IQ of 140, a performance IQ of 102, a relative weakness in math, and poor visuospacial skills, as well as being distractible, hyperactive, and impulsive.

2. **Teachers**: Require preservice and in-service **training** to recognize children at risk and to appropriately respond to their needs.
3. **Parents**:
   - **A.** Should be provided with the **training** necessary to effectively respond to their child's needs.
   - **B.** Must meaningfully **participate** in development of their child's IEP.
   - **C.** Must be part of a comprehensive home/school **service delivery** package.
4. **Individualized Education Program (IEP):**
   - **A.** Should address **risk and prognosis** as well as diagnosis and current status.
   - **B.** Should address need for **intervention** as well as remediation.
   - **C.** Should evaluate household and peer relationships in terms of **service delivery** potential.
5. **Community:** Attorneys, courts, police, correctional facilities, youth agencies and the like, must be educated and **enlightened**!

Our children suffer from the isolationist perspective of school systems that define their responsibility within the parameters of a wall they build between themselves and the communities that they serve. The failure to recognize and respond to the social and emotional needs of particular LD subtypes at risk for a lifetime of underachievement is an example of a "head-in-the-sand" attitude that encourages schools to avoid addressing the needs of a child when the impact is more social than academic.

Summary

There are factors both intrinsic (e.g., dyslexia, NLD, ADHD, EF) and extrinsic (e.g., school failure, socioeconomic status, adopted child status) that predispose an individual to anomalous prosocial development. In order for this observation to have meaning, LD subtypes must be appropriately defined so that the research inconsistency that is currently encountered will be addressed. Shaywitz, Fletcher and Shaywitz (1994b) put it best:

> The development of a unitary, empirically derived nosology . . . should increase the consistency and generalizability of findings across investigations and disciplines.

In order to accomplish this, Shaywitz, Fletcher, and Shaywitz (1994b) propose a "systematic classification study." Such a study is essential if we are to understand the unique needs of individual LD subtypes, comorbidities, and the complex correlation with social and emotional development. This call to arms is perhaps the single most important current movement in the field of learning disabilities. We must "disentangle this huge conglomerate mass" (Doris, 1993) if we are to develop truly efficacious methodology and service delivery.

Our current system of education must recognize the false promise of quantitative evaluation of pedagogy and curriculum and embrace a less Newtonian and more holistic paradigm (Heshusius, 1989; Dickman 1990) aimed at **identifying risk and preventing failure.**

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CHAPTER 10

The Parents' Role

Things to Know and Ways to Help

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PART I

ALICE P. THOMAS

Headaches and Heartaches

The child aches . . .

- "School hurts my heart."
- "I feel so stupid. No matter how hard I try, I still can't do my work. When people call me lazy and tell me to try harder, I feel like screaming I get so angry inside."
- "You just don't understand—I **am** trying!"
- "When I'm at school, I get so embarrassed. I can't do anything right. I don't know why I was ever put on this earth. I just want to die."

And so the parent aches...

- "What can I do? I feel like my child is dying inside, and I'm just standing around watching. Please help me."

Life is difficult, and parenting is hard. That is not to say that life is not an incredible experience or that parenting is not rewarding because they are. As parents, however, we all come to the startling realization that we are missing several hundred pages in our procedural manual for proficient parental navigation. This is particularly true for the parents of children with learning and attentional disorders, when even the experts have a hard time agreeing on the best maneuvers for traversing this *terra incognita*.

The underlying theme in Part I is the firm belief that while *all* parents should participate in the educational process of their children, the importance of a positive, vigorous parental role is heightened when a child has a learning disorder. Children who are struggling to learn are in perpetual need of more educational and

emotional support and encouragement than those whose course through school is relatively smooth. For the child with learning problems, it is absolutely critical—in fact, it is *urgent*—that his parents actively celebrate his diversity and that they embrace and impart hope. In Part I, I will identify a few guideposts—things to know and ways to help—for the parents of children with learning disorders.

I. *Heartache, guilt, fear, anger, and desperation are natural parental reactions to a child's learning disorders.*

Richard Lavoie, a specialist in the field of learning disabilities, said, "Research shows that parents tend to mourn over a child's learning disability more than for any other exceptionality, even Down's syndrome and cerebral palsy." Why? Because it is hidden. Parents think they have a normal child until the child enters school and suddenly problems reveal themselves.

Heartache. My husband and I are the proud parents of two terrific children who have learning disorders. When our first child (our son) was born, I held him in my arms, looked down at him, and thought there was nothing in this world more incredible than he, and at that moment in time, there wasn't. The miracle of his existence filled me up, and I knew that his was the most extraordinary soul that ever came to this earth. When he was two and then three years old, people would often say how wonderful he was and what a bright boy he was. Swelled with pride, I readily agreed with them all. Then he went to kindergarten and on to first grade, and my son's effervescent zest and smiling confidence dissolved. Died. Slowly heartache and reality set in; our magnificent son had a learning disorder. This was anguish I didn't plan on, and it was only the beginning of an ongoing, intimate relationship with heartache.

Guilt. What had I done to make this happen? How could it happen again? With our second child (a beautiful daughter, a porcelain definition of femininity) I worried that it was the sugar substitute I had selfishly used to stave off extra pounds during my pregnancy with her. Sure that research in future years would link the use of sugar substitute during pregnancy to learning disorders in children, I wallowed in guilt. Why couldn't I have just used sugar and lived with a few extra pounds?

Fear. How I feared for their futures! Our first child, who had been tested as having an IQ in the very superior range, didn't learn to read after two years in a phonetically-oriented program. Even though he knew all phonetic sounds perfectly, his internal computer lacked the chip for blending them into words. I became so fearful that he would never learn to read that I began planning a way to put all his textbooks on tape—I thought I could even begin a business to provide this service for all the other children who had this same problem. (Of course, he did learn to read, and learned very well, using a whole-word approach along with a phonetic approach, and *abundant* hard work.)

Anger. Oh, yes, I have been seized by anger. I have been angry that our children's school years are filled with senseless and overwhelming doses of struggling and

frustration. Angry that our son's kindergarten teacher was physically abusive to him because of her inability to manage her own frustrations surrounding his learning disorder. Angry that our daughter was quietly humiliated day after day. Angry that my children were so misunderstood. Angry and nauseated by discrimination. Angry that help that should have been accessible was so elusive; angry that something so fixable was viewed as too complicated; angry at the resistance of too many professionals to participate in humane, sensible management.

Desperation. I remember being held hostage by desperation more than once. I remember looking everywhere for help. I remember reading every book I could get my hands on. I still do. I remember trying vision training with an optometrist for our son, fully knowing it was a controversial therapy, but feeling so desperate that we tried it anyway. (By the way, it didn't help.) I also remember being told by one of our children's school resource teachers that if we wanted to pay her a little money "under the table" that she would pay a little more attention to our child during the school day. People know that parents of struggling children are desperate to lighten their children's burdens. It is important for parents to be aware that they and their children are easy marks for being taken advantage of, and to be careful that they and their children do not fall into the self-serving hands of self-serving people.

II. *The "ostrich effect" doesn't work.*

Many parents, too hurt with the realization that their "perfect" child is flawed, bury their heads in the sand like an ostrich. The trouble with this tactic is that while the heads are buried in the sand the problem does not go away; in fact, it often grows. As parents, we cannot pretend that our child will "grow out of it" or that this problem will fix itself if we just ignore it. Better to end denial and begin hard work.

III. *Beware of the clutches of the "blame cycle."*

It goes like this: frustrated parents blame the school; frustrated schools blame the parents; finally, the two converge and blame the child. The blame game is a terrible waste of valuable energy. *It* is not the school's fault; *it* is not the parent's fault; *it* is not the child's fault. *It* just *is*.

IV. *All children can learn, and all children want to learn.*

Think for a moment about your child as a first grader on the first day of school, armed with new notebooks and pencils in hand, a bit frightened, but full of excitement, enthusiasm, and a desire to succeed. Only years of disappointing failure can dull this desire. As a parent, remember always that your child wants to learn and wants to succeed. Priscilla Vail says it so well: "These children are not looking for a way out; they are looking for a way *in*." No one *chooses* to fail. Remember, too, that your child can learn. It may take longer; it may take more effort; it may take a different method of instruction, but your child *can* learn!

V. Listen to your children.

They will tell you what the trouble is. With your eyes *fully* open, *look* at your children; *see* what you are seeing. *Listen* to your children; *hear* what you hear. Trust your child's voice. When our son was screened for a private kindergarten, he sailed right through the general information and reasoning sections. Then it came time to write the letters of the alphabet. At age four and one-half, he turned to the tester and said, "I'm real smart, and I know a lot of stuff too, but I'm not so good at how to write." He is now fifteen, and he is still really smart, and he knows lots of stuff. But he is still not so good at the physical act of writing. He has many of the fine motor problems so lucidly described by Dr. Mel Levine—fine motor dyspraxia (the small muscles in the hand do not work well together to perform a task—often resulting in an awkward or tense pencil grasp), finger agnosia (knowing the position of the fingers in space is not automatic—often resulting in close visual monitoring), and sequential motor memory problems (difficulty remembering the sequence of motor movements—often resulting in a preference to print rather than write in cursive). He's really not so good at "how to write"! That is not to say that he doesn't have impressive ideation because he does; getting it down on paper is the hard part. Many experts, many tests, and thousands of dollars later, what our child had so brilliantly and simply described at age four and one-half was finally diagnosed.

VI. Trust your instincts.

Most of us are astute enough to know when our child is not feeling well. We know this because the clues are everywhere—for example, he doesn't eat his favorite meal; he doesn't want to play; he looks pale. In the same manner, there are usually clues everywhere to indicate that a child is having learning problems, if we will only look for them, and then let ourselves trust our intuition. If you think there is a problem, there probably is. At age three, our daughter's language development was lagging, and so she began language therapy. By age five, although improved, her language skills remained depressed. She was no longer comfortable in kindergarten—she had trouble following oral instructions, frequently misunderstood what was said, and gave delayed responses when spoken to. As parents, we kept saying that something was wrong with her hearing. Several specialists tested her, however, and reported the same conclusion: her pure tone hearing was fine. I began to feel the unspoken comment: I was an overreacting, neurotic mother. Still, my husband and I persisted. Finally we landed in the office of Dr. Charles Berlin, Director of Kresge Hearing Research Laboratory of the South, who verified that there *was* something wrong with her hearing—she had hyperacuity (the volume of sound is turned up), and she had very compromised listening in noise (all sounds, both important and unimportant, hit her brain with equal force). This accounted for the language delays and "close but no cigar" pronunciations that punctuated her sentences. It explained why she did not enjoy noisy parades and going out in the noisy rain. Finally, we had a reference point for efficacious remediation.

VII. Educate yourself.

It should go without saying that the more parents can know about the problems that face their child, the better. Understanding a child's areas of strengths as well

as weaknesses lays fertile ground for successful educational management. Knowledge is powerfully liberating; ignorance is incarcerating and intimidating.

There are neurodevelopmental constructs that parents need to know and understand. These are well described in Dr. Levine's books: attention, memory, language, fine and gross motor skills (small and large muscle coordination), visual spatial—temporal sequential ordering (understanding spatial relationships, organization, time, and sequences), higher order cognition (concept formation, making connections between concepts, problem solving, making inferences), social cognition ("people" skills), and behavior and feelings.

Seldom are these neurodevelopmental constructs affected in isolation; comorbidity is much more common. That is, seldom will a child have either/or. More common is a personalized, unique *combination* of specific problem areas in two or more of these areas. For example, if a child has problems with understanding language, he may lose interest in and fail to pay attention to oral language, and therefore fail to place important information into memory. Figure 1 shows the attention, memory, and language relationship that often traps children in a "Bermuda Triangle" of learning.

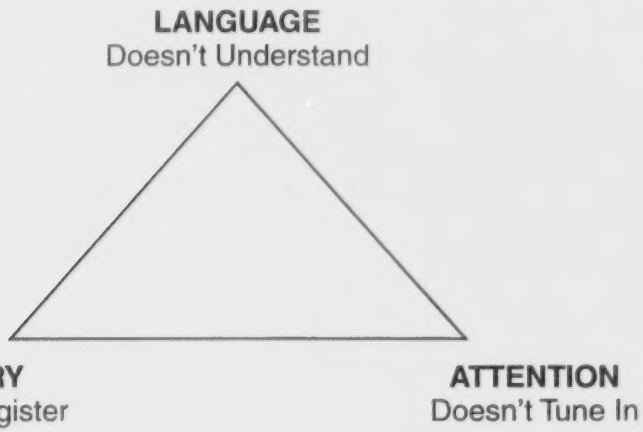

FIGURE 1
The Bermuda Triangle of Learning. *Source: Martha Reed, M.Ed., 1994 Section Head, Special Education, Center for Development & Learning, University of North Carolina.*

It is also important for parents to become familiar with the breakdown of each area that is problematic. For example, a child with attention problems may have poor selection of what information he should tune in to, which then leads to a weak or partial registration in memory of that information—a "Swiss cheese" piece of information. This results in poor consolidation of this information in long-term memory, so it then becomes difficult to retrieve it from memory when it is later needed. Searching through one's memory bank for the partial or fragmented pieces of information becomes increasingly frustrating and tiring. Mental fatigue sets in, and the child finally "tunes out" to that mental exercise. Figure 2, The Lethal Loop, demonstrates this domino effect.

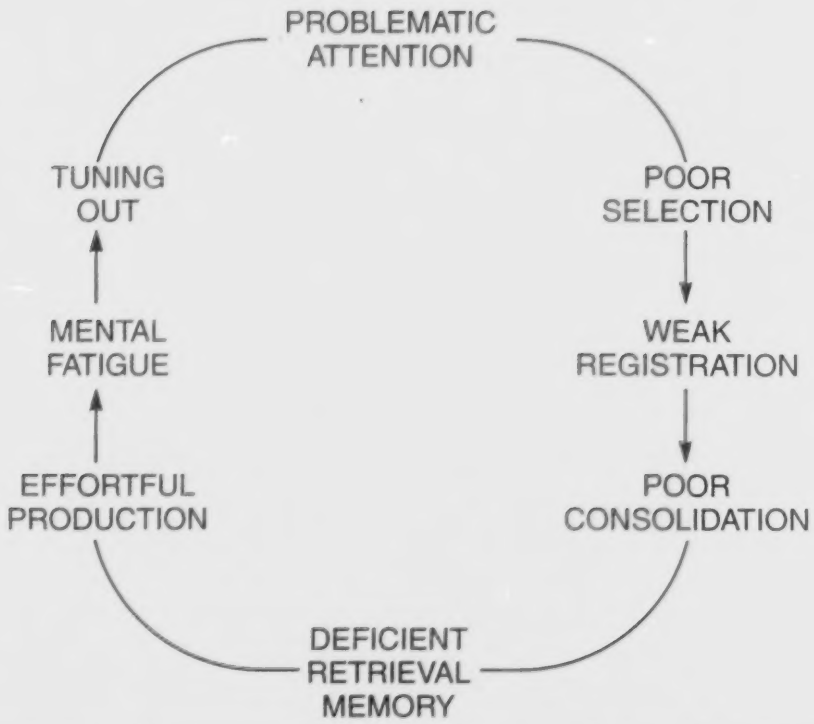

FIGURE 2
The Lethal Loop. *Source: Martha Reed, M.Ed., 1994 Section Head, Special Education, Center for Development & Learning, University of North Carolina.*

It is not just helpful for parents to educate themselves; this acquisition of knowledge is *critical* when parents have a child with learning disorders. Educating ourselves as parents is a no-choice/fundamental/have-to parental responsibility. Knowing allows parents to become robust advocates capable of engaging in informed discourse with school and clinician. In my husband's words, "It puts parents on the offensive rather than the defensive team." A list of suggested readings is included at the end of Part I.

VIII. Understand the difference between labeling and nonlabeling, both formally and informally.

Formal labeling (LD, ADHD, BD, dyslexic, ED, etc.—all those "D" words) can sometimes be an effective tool for securing services for children. Labeling for the sake of labeling, mislabeling, and misdiagnosing can be damaging and deadly. Denigrating informal labeling ("He's *immature.*" "She's *lazy.*" "He's *unmotivated.*" "She's *too sensitive.*" "He's *slow.*" etc.) is equally as deadly. It is important for parents to understand the difference between a descriptive narrative and labeling, and which will best serve their child's needs. When no services will be gained from formal labeling, narrative descriptions of the phenomena are much more beneficial for effective prescriptive, humane management. Even with labeling, descriptive narratives enhance the understanding of a child's profile and facilitate

the planning of effective management. And there is never a positive value to negative informal labeling.

IX. *Support professional development.*

In the field of learning disorders, we are a society of *un*informed and *mis*informed adults. The need for professionals to know more about effective assessment and management is widely endorsed. GOALS 2000 (U.S. educational goals that should be reached by the year 2000) states the need for professional development of educators. A 1994 national survey conducted by the National Center for Learning Disabilities showed that 98% of parents of learning disordered children surveyed believed that regular education teachers were not adequately trained to teach their children. Almost any regular education teacher will agree. Most good teachers are desperate to know more, especially with recent attention received by Section 504 of the Rehabilitation Act of 1973 (U.S. civil rights act which protects the rights of persons with disabilities), the reduction of funds to special education, and the present movement toward inclusionary models of education. As a regular education teacher, I can personally attest to the lack of training in both my undergraduate and graduate studies. Nothing in my training prepared me to teach the child who learned in a way that differed from the "norm"—whatever that is! Because most federal and state legislation does not provide funding for professional development, it is important for parents to lobby for professional development in their child's school or school district in a constructive, assistive manner.

While most agree that there needs to be more professional development for teachers, it should also be emphasized that all other professionals who are involved with service delivery to this population—e.g., pediatricians, speech and language pathologists, psychologists, educational consultants, social workers, psychiatrists, occupational therapists, etc.—would increase their effectiveness by being enlightened. It is important for parents to advocate for the continued educational development of these professionals as well, and to be a wise consumer in using only those professionals who keep abreast of current research and management techniques.

X. *Emotional fallout from learning disorders is a normal occurrence.*

As adults, if we went to work daily only to hear that our work was inferior and that we needed to "stop being so lazy," and if we were constantly asked to do tasks for which we were not trained and had no aptitude and then were ridiculed by our peers or employers because we couldn't do them, and if our employer called meetings with our relatives and outside professionals behind closed doors, we would soon be looking for another place to work. Unfortunately, children caught in similar situations do not have the option to flee to freedom. Thus, it should be no wonder that studies show that 83% of all children with learning disorders suffer from secondary emotional disorders. Dr. Stanley Turecki has written a book entitled, *The Emotional Problems of Normal Children*. The title alone holds a powerful message, as it proclaims that it is very normal for normal children to have some normal emotional problems. Therefore, parents of children with learning disorders need to understand that it is *normal* for the frustrations caused by

learning disorders to produce emotional problems. If we recognize this as a normal sequential occurrence and react to our children's emotional problems with sensitivity and good sense, then our children's problems may not mushroom into emotional volcanoes with eruptions spewing out even thicker pain and heartache. Finally, branding these children as ED (emotionally disturbed) or BD (behaviorally disturbed) is criminal and archaic.

XI. *The persistent odor of discrimination will permeate the air and nauseate you.*

Children with learning and attentional disorders are discriminated against with a subtle yet relentless discrimination. Because the disorders are hidden from eyesight, the exact target of the discrimination is more difficult to identify, making the discrimination broader and more deadly. That is, discrimination directed against a language disorder broadens to engulf the whole child. This pervasive, insidious discrimination is fired from the guns of both children and adults, and is often aimed at both child and parent. The wounds bleed as surely as any wounds, and parents struggle to know how to heal them. As parents, we can be sensitive to our children's pain. We can explain discrimination to our children, and we can teach self-advocacy and self-understanding. We can teach our children to forgive the ignorance that is the root of all discrimination.

XII. *Parents of children with learning and attentional disorders must be informed consumers.*

The task of shopping for the best professionals to work with our children's learning disorders is really no different than any other shopping exercise for an important item. For example, if we are shopping for a car, we do not always buy the first car we see, or the least (or most) expensive car we see. We generally shop for a car that will suit our needs, one that has the performance features we want, and one that is within (or almost within) our budget. So it should be when we shop for therapists for our children—we should look for one who will fill our child's needs, who has the training and performance record we want, and who is within our budget, keeping in mind that it is less expensive to pay once for a service well rendered than several times for one only partially or poorly rendered. We should also be aware that there are many controversial therapies on the market, and that we are gambling with our time and money when we use them.

XIII. *Collaboration means open communication.*

A good management team includes the child, the parents, the school, and other clinical professionals who are working with the child. These may include the child's pediatrician, speech and language pathologist, learning or reading specialist, social worker, psychologist, psychiatrist, and/or occupational therapist. True collaboration must include the child as a team member—after all, it is the child who is the focus of the management! To leave the child in the dark is disrespectful

of his integrity. Even young children know when we adults are talking "around" them. By their own experience, children already know that they have a problem that needs attention. Excluding them from the management team often leads them to imagine that the problem is much worse than it is, and it gnaws away at their self-worth. Including them in the discussion of how to manage the problem validates their worth and preserves their dignity. And often the children themselves will generate the most awesome management strategies.

If communication is not flowing from school to home, then parents should initiate the conversation, always in an open, friendly manner. Parents should also facilitate communication between school and clinicians working with their children. If we look at the story of the three blind men and the elephant where each blind man, feeling only one isolated part of the elephant's body, reached an obviously fragmented conclusion of what an elephant must be like, we are reminded of how a limited amount of information can distort our view of reality and lead us to narrow perspectives and crude conclusions. Getting rid of the blind-man-and-the-elephant syndrome may take considerable effort, but the results will be well worth it, especially in terms of progress and a healthy team relationship.

XIV. *The education of our children is a parental responsibility.*

As an advocate for children, as an educator, and as a parent, it is my strongest conviction that parents must assume a cardinal role in the educational process of their children. When a child has a learning disorder, learning is long, frustrating, hard work. Children who are struggling to learn need more educational support and scaffolding than those without learning problems, so the need for increased parental involvement becomes paramount. Parents must be active management team members and coordinators. Assisting with homework, assisting with previewing, prioritizing, and organizing the assignments, reinforcing skills, reteaching, clarifying, and reviewing . . . all of these are nightly parental duties. If parents feel inadequate to carry these out, then they should persist until they find this supportive assistance for the child elsewhere, either within the school system or privately. Parents cannot lay the burden of educating the child at the school's doorway and walk away. The obligation to see that a child is properly educated, first and foremost, belongs to the parents. Parents must invest time, energy, and resources to ensure that their children receive the education they need to become productive, happy community members.

Parents also have an eminent responsibility to model desirable behaviors. For example, parents should be seen reading frequently at home, organizing their work time, and keeping their workspaces in the home well organized.

Coaching with genuine enthusiasm should hold permanent residence in the daily itinerary of the parent of a struggling child. In *Answers to Distraction*, Dr. Ned Hallowell suggests four steps of daily coaching with H.O.P.E. It breaks down like this: H—Hello, Hi; I greet you with respect. O—What are your obligations for today (or for tonight's homework)? P—Have you got a plan? I'll help you develop one. E—Encouragement with enthusiasm—I know you can do it! And, good coaches always acknowledge a child's marathon efforts with authentic accolades. While all children (and adults) will benefit from a positive coach, for the child with learning and/or attentional disorders, a coach is an essential companion for

optimal maneuvering through the educational jungle. Who better to provide this support than the parents?

XV. Parenting at its best requires joint effort.

Both mother and father bear an obligation to openly communicate and share in their parental educational responsibilities. Whether married or divorced, every effort should be made to work in concert for the benefit of the child. It seems inherent that there is strength—and comfort—in unity. Helping with homework, meeting with the school, researching to find the best clinician—all the tasks that take considerable emotional and mental effort are best accomplished proficiently through shared effort.

XVI. Keep a positive attitude.

To be an effective parent of a child with learning disorders, one must embrace and deliver a constant message of hope. A positive attitude emanates hope. It is indeed difficult to parent children with learning and attention disorders. By working hard together, however, the strengths of the child will develop, and successes will be achieved. These children of ours are so incredibly rich, each in his own way, and there is every reason to believe that each can grow into a self-assured, happy, productive and successful adult. Always dodge the proclivity to focus only on the child's deficits; honor, focus, and then encourage your child to strengthen his *strengths*.

Along with hope, a positive attitude nurtures grace. Grace is that state where we reach balance between pushing forward and sitting back, working and resting, resisting and giving in. Grace allows us to look past the flaws and see the beauty in our children. It allows us to celebrate and enjoy their diversity. Grace allows us to find the *center*, the balance, to put things in perspective and enjoy and admire our children's individuality. It allows us to put away fear, forgive humiliation and discrimination, and walk past pity and shame with our heads up and eyes looking out. My husband and I are immensely proud of our two children for their extraordinary effort and courage, determination, and powerful records of accomplishment. They are *our* heroes. While life has been hard, it has also been richly rewarding to learn from these two exquisite young couriers of wisdom. Through them, I am learning about grace.

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Part II

Ann Kornblet

It is important that the Learning Disabilities Association of America (LDA) show support for the excellent effort in public education that the Louisiana Children's Research Center for Development and Learning is making at this summit. *Plain Talk about K.I.D.S.* is a true community service and will provide invaluable information on learning disabilities to hundreds of families and professionals. I am pleased to be a part of this effort as a parent and on behalf of the LDA.

Allow me to share a bit about myself and my family. I benefited from a strong parochial education. Attending parochial schools made a difference when I began working with the public school system as a parent on behalf of my child. It was an unfamiliar system and quite different from what I remembered of my student life. Often my expectations were completely off-base, and this added to the frustrations we experienced as a family. *It is important to understand the school system your child is attending.*

My husband and I have three children; our middle son has learning disabilities. As a family we have had to adjust to having a child with special needs. I have been involved with advocacy for sixteen years for our son, who is now eighteen. That has meant that I am not always there for everyone, and my husband and I have had to change our expectations often. Our other two children have had to learn to deal with their own feelings and their relationships with their brother in ways that work for them. We have all learned to support one another without too much resentment, but that has taken a long time. *It is important that all members of a family with a special needs child are nurtured, listened to, and supported.*

Learning disabilities is a term that covers a broad range of unexpected deficits, and these unexpected learning problems can occur in a broad range of individuals within a broad spectrum of intelligences. These processing disorders may be severe and numerous or less involved and occur in only one area of learning, but they are almost always life altering. My perspective is that of a parent with a child that has a severe disabling condition. "Learning differently" does not describe the processing problems he has. My son has a number of strengths but many challenges. My child will not be able to succeed without very specific aids, accommodations, and supports that are particular to him. *It is important to know that learning disabilities affect a wide range of children in many different ways, and each child has individual needs.*

There are many children like my son who need lots and lots of support, and there are many more children who have less intense deficits and who, with the right support at the right time, can proceed with their education with success. The need for early, appropriate, and complete evaluation cannot be stressed enough. The child and the family have a right to know what the specific problem is as early as possible so the family may take appropriate steps to provide for the child. *It is important to provide an appropriate and complete evaluation as soon as a problem is suspected.*

For a child, failure to learn is an awful, confusing, and emotional experience, and the one with the most significance for his or her future. Not many children handle the crisis of not learning without feelings of inadequacy and sadness, without being discouraged, or eventually feeling angry or aggressive. As parents, what do you do if there is reason to believe that your child has a learning problem or possibly a learning disability? You are at the beginning of a process to obtain help for your child. Try to remember that no matter how frustrated or upset you are, your child is very vulnerable at this time, especially if he or she is already in school. If the child is beginning school or is younger, you have a chance to get supports in place before a negative school experience occurs. Work to keep your child's self-image strong by concentrating on strengths and activities that provide enjoyment. Help him to feel good about who he is while you go through the discovery process together. *It is important that the family and child accept the child for who he/she is and together build on his/her strengths.*

Parents are well served by self-education in two areas before proceeding with the evaluation process. First, an understanding of the different types of

symptoms associated with learning disorders is helpful. Second, a knowledge of the child's classroom, school atmosphere, and school adequacy is vital.

All children want to "fit in" and in school that means succeeding. Those who appear to be lazy, disinterested, or unmotivated have difficulties which are interfering with their performance. They frequently have unrecognized attention deficit disorders—or they may have central nervous system processing disorders. These disorders may affect the auditory or visual processing of information and/or the verbal or written expression of knowledge—these are learning disabilities. A learning disability is an inability to learn through the usual methods of instruction despite adequate intelligence, a normal environment, and intact physical and emotional capacities. There is a discrepancy between what we believe a child should be able to do based on his intellectual potential and what he is actually achieving. It is a breakdown in learning through traditional methods which seem adequate for most children. [1] *It is important to have a basic knowledge of learning disabilities.*

If the following components are missing from the classroom, a large number of learning problems will occur.

* There should be no more than twenty students in the classroom.
* The teacher must be well-trained and well-supported by knowledgeable aides, and have the materials he needs to teach.
* The teacher must have an understanding of diverse teaching methods.
* The teacher must believe all children can learn under the right circumstances.
* The students must receive positive, regular, instructional feedback from the teacher.

More and more children are being referred to special education to alleviate the failure of general education to teach. You do not want your student to become a part of the school's failure. *It is important to send your child to a good school.*

In the evaluation/diagnosis process, Dr. Doris Johnson states that the parent must know enough to insist that the "diagnosticians and educators look beyond single areas of achievement such as reading and arithmetic." Dr. Johnson further states that "problems in one area of learning typically have secondary impacts on higher levels of learning. That is, comprehension problems typically interfere with expression. Every effort should be made to examine patterns of problems and to avoid fragmentation of services so that each area of underachievement is not treated separately." In other words, the whole child must be looked at, and the parents must be involved in the evaluation. Only with your input will a true picture of the child emerge. *It is important that parents be an integral part of the evaluation process.*

Remember learning disabilities are not only school-based. Processing deficits may affect all areas of the child's life. They may interfere with the social activities and mental health of the individual. Therefore, the student may need multiple services. The parent must advocate for the specific services needed for the child. You can see the importance of the diagnostic evaluation; if it is not thorough, it will not reveal to what extent the learning disability affects the child.

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[1] E. Copeland, Ph.D. *Challenge*, Nov./Dec. '94.

The evaluation team, including the parent and the regular education teacher, must consider the extent and type of special education needed to meet the child's needs. This could simply amount to structured awareness on the part of teacher, student, and parent, or it could require extensive and detailed support and accommodations. The important principle that underlies a successful special education program for students with learning disabilities is the careful selection or tailoring of techniques that will be used to remediate or compensate for the student's areas of academic concern and to address any other possible problems that accompany the learning disabilities.

All of this information will be formulated in the Individualized Education Plan (IEP). This is the most vital instrument for the guidance of the student. The IEP sets the curriculum for a student based on his or her current level of performance and individual needs. The IEP should be based on the student's needs and not on the availability of resources.

On behalf of your child:

* *Know your child.* Observe how he learns, what frustrates him, and what pleases him. As you implement this observation process, include the whole family, especially the child with the suspected problems.
* *Do your homework before you use private evaluators, psychologists, or therapists.* Referrals from other parents or parent-support organizations are a good way to proceed. Do not buy into a quick fix—there is no such thing.
* *Learn the law.* Know your rights and the rights of your child.
* *Read, read, read.* Gather material from organizations like LDA, CHADD, NCLD, Orton, ASHA, and local libraries. Attend advocacy conferences.
* *Establish a working relationship with the school, and seek out other parents for support and information.*
* *Never assume that everything is going well at school.* If you do not hear from the teacher every couple of weeks, call or visit the classroom. Make sure the teacher knows you expect periodic feedback.
* *Let your child know he/she is important to school and family life.* Show your children how to advocate for themselves.

In many cases, the special needs learner does not require segregation from the mainstream classroom, and in some cases the special needs learner may need to be in a special class. Children with learning disabilities should never be segregated from mainstream curriculum, nor do they need to fear embarrassment, frustration, or failure academically or socially. Parents, teachers, and the community are all responsible for and capable of making learning for all children a rewarding, enjoyable, and successful experience. For this to take place, parents and teachers must accept that invisible handicaps are real and then work together to provide a quality education for all students. Learning takes place at home as well as in the classroom, and students must know that their efforts reap benefits and lead to success.

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EDITORIAL STATEMENT

The dialogue in Chapters 11–17 has been edited for both clarity and reduction of the length of this publication. Every effort has been made to preserve thoughts as they were intended to be communicated by the speaker.

CHAPTER 11

Collaborative Management at Work

Open Dialogue

❦ ❦ ❦

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LEVINE: This morning, I thought we would base the discussion of collaborative management on three case studies I have compiled. I will get us started this morning by simply, grand round style, reading the cases.

RAMONA

Ramona is a fourteen–year–old girl in the eighth grade at a local junior high school. Despite a good start in the first three grades, in recent years she has endured increasing frustration in school. She experiences her greatest difficulty in mathematics and in writing.

Ramona possesses a great many strengths. She is described by her teachers as a good athlete and an adolescent who is very well liked by her peers. Her mother and teachers concur that Ramona is incredibly creative; she is a superb cartoonist and caricaturist, although she has had no formal art lessons. She composes sensitive song lyrics that are poetic and amusing. Also, she designs her own clothing.

Despite her notable assets, Ramona is in danger of being retained in the eighth grade. She has not been handing in assignments lately, and there has been a conspicuous decline in her attitude toward school. She insists that school is boring. She is mainly interested in her friends, most of whom are also doing poorly and showing an indifferent attitude toward education.

Ramona insists that she "hates" mathematics. She is repeating Algebra and is failing the course. Although she claims to understand the subject, she performs abysmally on tests and does little or no homework. She asserts that Algebra assignments take too long. In first and second grade, Ramona was relatively successful (i.e., on grade level) in arithmetic. However, over the next two years there were serious problems with the recall of math facts and algorithms. Additionally, her sixth grade teacher once observed that Ramona is the kind of student who seldom knows "what to do when." Her mother has noticed that when Ramona works on a math problem, she often loses her place, forgetting what she has already done, and what she intended to do next!

There have been no obvious problems with reading, although Ramona reports that she hates to read. Her mother has never seen her pick up a book or a newspaper. When she tries to study for a test, Ramona is at a complete loss; she seems totally overwhelmed and frustrated. Additionally, Ramona seems able to learn specific facts for a short time (long enough for her mother to test her before she goes to bed), but she tends to forget these very same facts on a test the next day.

Written output has been a chronic source of academic pain for Ramona although she has excellent ideas in class discussions, what she manages to get down on paper is relatively simplistic and crude. Her handwriting is legible, and her pencil grip is appropriate, but the rate of her output is agonizingly slow and the effort too great. She makes multiple mechanical errors and has significant spelling problems. Interestingly, her spelling has always been fairly good on spelling quizzes, but is often seriously compromised during writing. Ramona resists using a computer for writing.

Ramona is cooperative and compliant in class. She displays no evidence of attentional difficulty. She is able to follow directions well and seems to understand her teachers' explanations in all content areas. Ramona reports that she is afraid she will get called on in class. It takes too long for her to come up with the answer,

and she is likely to be wrong anyway. In classes where there are many possible correct responses to a question, Ramona feels less anxious and actually comes up with impressively original and well stated ideas.

Ramona's teachers believe that she is a bright girl who is poorly motivated and lazy. When she was in sixth grade, Ramona was tested by the school psychologist and found to be of above average intelligence. A report at that time stated that she did not have "LD" and therefore was not eligible for any services. Recently Ramona's mother consulted her pediatrician who has always had good rapport with the children. The pediatrician reassured Ramona's mother that her behavior was typical for an early adolescent. He didn't feel that it would be worthwhile for him to talk to Ramona or try to help evaluate her problems in school. He suggested that the school test her again. He also expressed a willingness to "try her on a little Ritalin" to see if it would help. Ramona's mother decided not to pursue that offer.

At home, Ramona is becoming increasingly rebellious. She is accepting little responsibility. She has started to smoke a great deal. She remains out late at night with her friends and becomes incensed when her mother tries to place any limits upon her. Ramona's father was killed when she was seven years old. She has an older sister and a younger brother, both of whom are succeeding in school. Ramona is starting to inhabit a world in which the only thing that matters is her friends. There are no signs that she is overtly depressed. She has talked about dropping out of school and going off with her boyfriend (whom she has known for three weeks). She no longer shows any interest in sports or artistic endeavors.

GREG

Greg is a twelve-year-old boy in the seventh grade of a rural middle school. He is currently failing three subjects and is displaying increasing belligerence and noncompliance in school.

Greg has had long-standing academic problems. In preschool he was first noted to be delayed in pre-academic skills, such as counting and naming colors. He was also very active and sometimes disruptive. In the early grades, Greg had a problem acquiring decoding skills for reading and also seemed unable to master basic arithmetic concepts and operations. However, his teachers in the early grades observed that Greg appeared confused and disinterested when stories were being read. Moreover, he seldom participated in class discussions. When called upon his responses were always nonelaborative, and he had trouble revising anything he said. His teachers also noted that Greg needed to have directions repeated several times. Even then he sometimes appeared disoriented, and he tended to try to imitate what others were doing.

As he moved along in elementary school, Greg exhibited increasing difficulty with his attention. He often was spotted daydreaming in class. He was fidgety and highly distractible. His academic work and rate of skill acquisition declined steadily. In arithmetic he continued to show a good mastery of facts but was slow to assimilate new concepts and was very poor in dealing with word problems. His reading comprehension and vocabulary scores on standardized tests were below the 25th percentile consistently. He hated to write. When required to do so, his productions were sparse and grammatically inadequate. His spelling was delayed about one year and characterized by mixed error types. Greg continued to be a

nonparticipant in class discussions. However, he was remarkably fluent and verbally proficient with his friends at lunch or on the school bus. He was always an active participant in such social discourse.

Greg's parents have sought considerable help for him in the past. They have consulted many clinicians. When he was five, they were told that Greg had ADHD. He was put on Ritalin which seemed to calm him down. He has been on Ritalin ever since. Psychological testing in school in fifth grade showed a discrepancy that qualified Greg as having "LD." He received resource room help for a year. His parents met with a committee from the school in January of sixth grade. They were told that their son had "LD" and also was "behaviorally disturbed." They sought another opinion from a child psychologist in the community. He said Greg was suffering from depression and needed counseling. The psychologist did not "feel" that Greg had a learning disability. If he could overcome his depression, he would start improving academically. Greg and his family then had counseling for eight months. They quit when they saw no change in Greg and their insurance coverage was running out. Greg hated going and insisted that it was a waste of time.

Greg's academic work is continuing on its downward spiral. He is seriously delayed in mathematics; he has failed Spanish, and he is doing very poorly in social studies. Furthermore, Greg has started to associate with "the wrong kind of kids." He has been caught stealing twice, once by the police and once by the school. He lies incessantly. He is an attractive boy who is extremely preoccupied with looking and acting "macho" and "cool." His parents recently discovered marijuana under Greg's mattress and have been afraid he will soon be abusing cocaine.

A few weeks ago Greg underwent a multidisciplinary evaluation at a local hospital. Greg's father was shocked at the $1,500 bill (not covered by insurance). They received a report that Greg had ADHD, Oppositional Disorder, Conduct Disorder, Anxiety Disorder, and possible LD. They recommended a review of his mediation, more counseling, and some tutoring. The school principal described the report as "worthless to us." Greg's mother lamented, "To this day we have no idea what is wrong or right with Greg. And no one has ever been able to tell us what we should be doing."

Greg's school this year has adopted a full inclusionary model. Therefore, Greg is no longer in any pull-out programs. An aide visits two of his classes several times a month. Greg's teachers throw up their hands. They feel he probably doesn't need help anyway; he needs to become independent. On the other hand, they have no idea of how to deal with students like Greg. They have no background or training to help them understand how to manage such a student. They also concur that Greg is not the only one. There are many others like him in the school—seemingly more every year.

Greg's father is the service manager at a car dealership. Sometimes he takes Greg to work with him and is amazed at how insightful Greg is when it comes to problem solving with a car engine. Greg has always loved cars, trucks, and motorcycles. He and his father have reconditioned several old cars. Greg's work on this has been extraordinary; he has exhibited no trouble concentrating while rebuilding an engine. In fact, Greg has shown no significant problems with attention outside of the context of school or school work. His father recently pointed out that Greg would probably be on the honor roll if he could read, write, and do math about cars. Greg also loves to go hunting with his father. He is infatuated with guns. Unfortunately, over the last six months, Greg has lost interest in pursuing anything with his father and declines all invitations to do so.

Greg's mother says she wishes she could freeze him and thaw him out in about eight years. She believes he has all the ability needed to do well "doing his own thing" as a grown up, but she wonders if he'll ever get there or if he will be destroyed by the daily humiliation and relentless criticism he endures in school. Last week in any angry outburst, Greg shouted to his mother "I'm a born loser. I'm a 'retard.' So just bug off." His mother describes Greg as his own worst enemy.

ANTHONY

Anthony is a seven-year-old boy in the second grade. He is a rather unusual child who has confused his parents and his teachers over the years.

When Anthony was about three years old and in day care, his teachers noted that he was extremely active. Over the next year, he was often "in a world of his own." He overindulged in parallel play and barely communicated with the other children or adults. At times he was highly resistant, especially during transitions. His only peer interactions were marked by aggressive behavior and outbursts.

By the time he reached kindergarten, Anthony's interpersonal problems had intensified; he had formed virtually no peer relationships and was often found off by himself fantasizing actively. His teacher noted that Anthony said very little but seemed to have no trouble processing verbal directions and explanations—when he paid attention. In first grade, Anthony acquired academic skills slowly. By early second grade he was reading at a mid first grade level and seemed to have mastered some number concepts.

At home many of the same phenomena are observed: problems with attention, speech, and peer interaction are evident. On the other hand, Anthony relates fairly well to family members to whom he shows some affection and attachment. Anthony has encompresis (bowel incontinence) and enuresis (bed wetting). He has to take occasional medications for asthma and Tegretol for a seizure disorder. Anthony's last seizure was at age four. Otherwise, he has been in good health.

Anthony has always loved animals, especially snakes. He reads through books about snakes, lizards, and related members of the animal kingdom. He retains such information remarkably well. He is at his most fluent when he talks about animals. In general, however, Anthony doesn't speak much at home. His parents have observed that Anthony can entertain himself for hours on end.

At age four, a diagnostic team concluded that Anthony was autistic. A school psychologist said he had Asperger syndrome. Psychologists in the community several months later diagnosed Pervasive Developmental Disorder. Anthony's pediatrician felt strongly that he was "a classic ADHD kid." The school suggested that the parents seek a language evaluation. The speech and language pathologist diagnosed a communication disorder. A special educator in Anthony's school observed him several times in class and wrote that his problem was extreme immaturity and poor social cognition.

Because of the complexity of the case, six months ago Anthony's pediatrician referred him to a psychiatrist who specializes in psychopharmacology. He placed Anthony on Ritalin which seemed to help his attention and reduce his activity level. However, Anthony got depressed and "zombie-like" on this therapy. He was switched to Dexedrine with the same result. He was then given Clonidine to control aggression. However, his attention worsened, so a small dose of Ritalin

was added to the Clonidine. He again became depressed, so he was given a new regime of Tenex which is a Clonidine derivative plus Desipramine plus Ritalin. After two months, his parents and teachers were unable to see much difference on these drugs, and they wondered what the long term medication plan was.

At the beginning of second grade, Anthony's teacher insisted that he belonged in some kind of "behaviorally disturbed" class. She stated that she simply could not handle him. She added that it was just not fair to the rest of the class when she had to spend so much time with Anthony. She also pointed out that she had read all the reports on this student and still had no idea what was going on with him or how to deal with him in class.

Anthony's parents were utterly confused, frightened, and dismayed over their son. They could not reconcile the contradictory things they had been told by various experts and the school. They decided to seek one more independent evaluation by a multidisciplinary team who claimed to offer a descriptive/phenomenological approach to assessment and treatment. The team (a psychologist, an educational specialist, a social worker, a speech and language clinician, and a developmental pediatrician) reviewed Anthony's history and performed various assessments, including a neurodevelopmental examination. They uncovered significant dysfunctions of expressive language (weakness for word retrieval, sentence formulation, and narrative organization). They also noted some language strengths (in overall receptive abilities, phonology, and semantic networking). Additionally, Anthony was found to have excellent visual processing functions, strengths in multiple components of memory, and some strong conceptual abilities. Weaknesses were found in Anthony's social skills (especially verbal pragmatics, greeting skills, perspective taking, and social self-monitoring) and his attention. Some graphomotor problems were evident and making written output a struggle for Anthony. His affinity for things biological was documented.

Anthony's profile of developmental strengths and weaknesses was presented without the use of any labels. Anthony was further found to have excellent parents, surprisingly intact self-esteem, and some genuine intrinsic motivation. The team compiled a plan which included demystification for the parents, the teachers, and Anthony, a series of by-pass strategies and interventions at the breakdown points and the enhancement of his strengths and affinities. The developmental pediatrician reviewed the interactions between the various medications Anthony was taking. She also set up a school and home management protocol for the bowel problems and agreed to serve as Anthony's long-term case manager, family advisor, and advocate. She was willing to follow Anthony's progress over the coming years without invoking any specific label or prognosis for him.

The second grade teacher found the report helpful but still did not feel qualified to work with Anthony. The school principal sympathized with her. With the support of the superintendent, he arranged for a series of ongoing professional development seminars and case discussions for the faculty and administration. The teachers came to see that by learning how to help Anthony they became more sensitive and more knowledgeable teachers in general.

Anthony has been making great gains this year. He is not on any psychoactive medication. However, he would benefit from formal language therapy which no one is willing (or able?) to pay for!

LEVINE: These cases give us a concrete representation of the issues that we really want to cover this morning. Do we have any volunteers who want to provide any

commentary on issues particularly related to multidisciplinary collaboration, using these cases as examples?

KORNBLET: Responding as a parent and then as an advocate, I am concerned with the use of the term "LD." LD is a term and not a diagnosis. As parents, we cannot accept the two words "learning disabled" as a diagnosis. When you have an evaluation, it must list areas of achievement and deficits and how they affect the child in school and in his every day life. The next step is to sit down with a team and work through an educational plan, which, without using the labels, was done for Anthony. By law, what was done for Anthony is what should be done for all of our children that need special help in school.

BALLANCO: One of the themes running through all these cases is the lack of effective multidisciplinary assessment. The people who were seeing the children weren't talking to each other and weren't talking to the parents. That same problem permeates the private clinical area. For example, as a pediatrician, when I see a child who needs an educational assessment, I have to send that child to an educator. If that child also needs a psychologist, I need to send the child to a psychologist. Then the three of us must meet together to develop a cohesive plan for someone to monitor. The parents have to pay for each one of these interventions. This is a very expensive and difficult way to organize a program. Even under the best of circumstances, it takes about two months to complete. Meanwhile the school and the parents are struggling.

EDWARDS: It has often occurred to me, in working with adult students and with public school kids, that if we had a school system which valued and emphasized visual perceptual skills rather than verbal analytic skills, many students would be termed "learning disabled in visual perceptual skills," and we would probably invent all sorts of new deficit terms to describe them. In fact, we would see symptoms of attention deficits, as we would find many of our students having difficulty listening to complex instructions on drawing. We would see all sorts of motor problems. But this is not the case. We have school systems that emphasize verbal analytic skills. More and more of the students being brought up for evaluation are students who have a great preference for visual/ perceptual kinds of learning. We are losing these children. The question that constantly occurs to me is: Are we judging children because they don't fit into the school system? Are we losing these children because of this? Shouldn't the school system change to fit the needs of the children? This is a burning question.

LEVINE: I think that will be a recurring theme this morning.

SANDS: I have three thoughts. The most important thing that stood out was the pain of the parents and the children in these three cases, pain that did not have to occur. If multidisciplinary models had been used to ferret out the costs of what we were doing, we would have approached these children in a much different manner. I see in these cases families and children who have had multiple interventions, but no one ever put together the cost benefit of interventions. What struck me was the cost of losing, particularly Ramona and Greg, for both their families and for their schools. Both of these children had tremendous talents to bring to the classroom if they could have found a way to bring them in. What is the cost going to be to deal with what we have lost over their poor educational experiences?

The second thing that struck me was the story of the three blind men looking

at the elephant. In these cases everyone had a piece, but no one ever sat down and put the pieces together. It wasn't until the last case (Anthony) that a group sat down and said, "Wait a minute. How do the different pieces we have fit together? How can we work together? How can we make this all understandable to us and to the individuals who work with them, so that when these people go home at the end of each day, they have a sense of success and achievement—the child, the parents, and the teachers?"

The third thing that was absent was a case coordinator or consultant. Saying that someone has Attention Deficit/Hyperactivity Disorder, or a learning disability, or a behavioral disorder doesn't solve the problem. That isn't where things end. A coordinator needs to work with all individuals involved to make them part of a team and to help them work with the child to accomplish set goals so that development can proceed for the child, and the child can feel successful and ready to go on in the world. What was so striking about Anthony's case was the ability of a team to finally get parents and teachers to become part of that team. To say, "Wait a minute, it is not us versus them. All of us are really on one team working toward the same goal."

Levine: Excellent.

Dickman: What I see especially in Anthony, who has been described variously as having Asperger Syndrome, Pervasive Developmental Disorder, autism, classic ADHD, a communications disorder, and extreme immaturity, is something I see a lot in my office. That is, basically a thrashing around for an answer because of something I call "referral bias." Very often, if a child with a disability is referred to a person in the field of learning disabilities, the child comes back with a diagnosis within that field of expertise. If referred to a neurologist, they will come back with a neurological impairment; a psychologist will come up with an emotional disorder of some kind, etc. We get a variety of suggestions as a diagnosis, all of which have some support, but none of which are complete in and of themselves. What I find is that we need somebody or someone in the professional sector to gather all of the input that is coming in and interpret this input and help the family adjust their expectations. By determining the exact needs of the particular child, they can help the school district, and the school district can help itself respond appropriately to those needs in an organized fashion. If we have all this input and nobody is responsible for managing it, then there is a great deal of difficulty in focusing a response.

Levine: Absolutely. I don't think there is any individual who independently, without input from others, can put together the whole picture; at least I am not aware of such a super generalist. In fact, when I was in Boston, the Psychiatry Department at Children's Hospital told me that I was totally "psychostatic." Psychostatic is the opposite of psychodynamic, and they invented the term for me, and it is really true. To this day, I can sit down with a family that is totally dysfunctional, and they look just fine to me. Therefore, I need to be able to collaborate with people who can deal with those issues because those are very important issues, and I have no capacity to deal with them or ferret them out. It would be dangerous for someone to see just me without having someone else look at those family issues.

Steeves: I think all of my colleagues are absolutely "spot on." I want to pick up on one word Mark Sands said, which is "success." When I read Ramona's case, my

immediate reaction was, "This kid needs success." Sometimes, the multidisciplinary team in school is too close to that child to see what is going on. They come up day after day against a child who is belligerent, sulky, and failing, and that is the only way they see her. Sometimes they need somebody from outside who is not so close.

The immediate thing I would do with Ramona is sit down and talk with her—talk about how I know she was successful in math when she was a little kid. Why was she successful in math when she was little and not now? Well, one, she's a girl, and I hate to be sexist, but she is a "teacher-pleaser." She went into school giving 150% to get everything right to please the teacher. Later on, even though she is a very intellectually adequate child, she was unable to understand the concepts; she had been pushing the numbers around, doing that surface stuff very well. She also has a writing problem. I would start with her classroom teacher suggesting a few accommodations that could be made. This child needs to be taught, and she needs to achieve success. The requirements for her should be ones that lead her to success. For example, because she writes poorly, if she is allowed to give the answer without all that boring stuff in between, she probably will get the answer right. And if she achieves success in the classroom, then we can begin to address other things.

Multidisciplinary teams in school are too close to the kids. They need someone from outside who can come and see the strengths and capitalize on the strengths before beginning on the weaknesses.

Levine: Although I agree with you and think you are basically "spot on," we all have to learn linguistically. People in school might turn to you and say the multidisciplinary team from the outside is too far away from the real world, that they don't know what this kid is really like on a day-in, day-out basis, you guys in your ivory tower. So we can say that the team in school is too close to it, and they can say we are too far from it. Some kind of accommodation has to be reached between those two.

Vail: It seems to me that most of the work of multidisciplinary teams has to focus on whether the child's behavior is jamming the academic machinery. Each of these children has a significant talent and a significant strength. We can use the child's passion as a hook. We can bring the child into evaluations and start listing the child's proclivities, making the child and parent feel proud rather than ashamed. In my experience, if we try to make a treaty with a kid and say, "Here are the things we know you love doing, and that you do very well. We are going to find a way for you to exercise those talents while you are in school. We are going to find a showcase for those talents." When we do this, we get rid of a lot of the oppositional behavior—not all of it, of course, but if we begin there, we stand a chance. Something else we need to remember is that kids who are having trouble in school undervalue what they do well. They think it doesn't count because it is easy, and the only things that count and influence grades are the things that are hard. In each one of these cases, the children's talents don't count in the academic machinery, and their weaknesses jam it. So if we can find the talent and showcase and praise the child for it, we become allies instead of enemies.

Levine: I think that word "*showcase*" needs to be emphasized because it is a beautiful concept. We want to take someone's talents, and not just acknowledge them, but make sure they are displayed prominently. This is true at home as well as at school, by the way. Most of the children we are talking about are pretty sure their

parents love them, but they are not so sure their parents respect them. They sometimes wonder whether they might ever hear their parents boasting about them to someone else. It is very different from being loved.

McGee: If left unattended, Ramona and Greg are going to end up in my court. I see about two or three dozen Ramonas and Gregs each week. The spiral of failure is going to cause them to drop out of school and get into all kinds of conflicts. I agree with showcasing the talents. That concept is absolutely on target. Something that is interesting in all three of these scenarios, however, is that the children had two parents who were interested, knowledgeable, helpful, and concerned. We would all like to think that exists in the world. I am here to tell you, unfortunately, that in my world and Judge Greene's world, and the worlds of others of us who deal with kids who are delinquent, abused, neglected, runaways, and ungoverned (which sometimes comes from not addressing these kinds of issues) we don't have two interested, dutiful parents. We are very lucky if there is one half-baked, overstressed mother coming in with the child. So the child in our court who may have learning difficulties comes there with ineffective, unconcerned, and sometimes absolutely abuseful and neglectful parents. If anybody is going to be the parent, it is unfortunately going to have to be the educational system in a broad sense, or some sort of other advocacy system.

Dickman: On the issue of showcasing talent, I have seen a number of children in my practice as an attorney where certainly that is very effective, although I have seen a great many children where the talents haven't yet emerged that are capable of being showcased. Nevertheless, the children are at risk for having significant ego problems or developing ego problems. One strategy I have found successful with that is having the parents develop independent skills for these children; that is, almost creating a talent. For instance, if we lived in New Orleans, one of the skills we might suggest is ice skating because other kids in the neighborhood don't ice skate, so the child doesn't have to deal competitively with their friends and their peers in school. Where I am, it would be something like horseback riding because we don't have much horseback riding in New Jersey. Then the kid comes back to the neighborhood, and no matter how much talent he has with these particular tasks, he is better than anybody else he knows. He has a story to tell, and he is proud of having that story to tell.

Levine: There was a very interesting series of studies published in a journal called *Child Development* about two years ago which looked at how children decide whether or not they have any kind of intellectual ability in any domain. One of the most important findings in this series of studies was that for a kid to develop appropriate self-esteem, one of the most essential things was to be able to get praise for doing something well that most other kids can't do. That is a really interesting mandate, and it becomes absolutely critical for this population. I agree.

Hallowell: The trouble with a lot of kids that I see is what they can do well that other kids don't do is stuff grown-ups don't want them to do!

These cases bring forth a cascade of thoughts in my mind. It is really hard to focus on one. I must say that as much I was hoping to disagree with someone on the panel, they all seem to be "spot on" to me as well. In reading these cases, I feel sad that we haven't gotten to where we should be. I'd like to take the position of the Monday Morning Quarterback and say I wouldn't have handled these cases like that, but of course I would have. I have made all these mistakes—made the

wrong diagnosis and given the wrong medication and made the wrong recommendation, and felt quite humbled when I saw things turn out not quite properly. I would have felt very sorry that I didn't have better access to the school or the multidisciplinary team.

The kinds of assessments that Dr. Levine is pointing us toward are the way to go. We have to train people in nonlabeling assessment, and get back to what Mrs. Eldridge did for me when I was in the first grade with my dyslexia. Here was this woman who had no training whatsoever, and she did a nonlabeling, multidisciplinary assessment of me. She would not have known what that meant, but she knew I had trouble reading, and she knew the other kids were beginning to laugh at me. She intervened, and she did it on sight at the breakdown point. She did it while she was teaching the rest of the classroom, and she did it using methods that didn't cost a nickel. I always go back to her because she is the best model I have ever seen of how to take a learning disabled kid, namely me, and treat the disability while also emphasizing my strengths. She played to the part of my brain that loved words while treating the part of my brain that couldn't read them. It was the most important intervention I ever had in my educational career.

If we can get to these kids at an early age and identify the problem without labeling it, and at the same time provide a therapy that is based on common sense and practical observation, then we will have a treatment plan that will work—especially if it is done in an atmosphere of a positive emotional envelope. All the debates and political squabbles to me seem pale when I go into a classroom and see the pain, not only of the student but also of the teacher who is trying to cope with it. It is rare to find a teacher who doesn't put his or her heart and soul into the work. We have to get behind teachers and schools and these kids so that learning doesn't have to be a humiliating process for anyone.

STEEVES: We have to remember, especially with adolescents, that their school failure is more evident in a classroom and with homework than it is in the other parts of their lives. It does impinge on the rest of their lives, certainly; but in Ramona's case study, Ramona cares very much that her friends see her as "cool" outside the classroom. But they also see her as a failure inside the classroom. We have to think very carefully about what accommodations can be made inside the classroom. The teacher is not going to teach Greg to do math only through cars; she is not going to let him read only a book about cars; but she might sometimes, if we make those kinds of suggestions. Certainly we need to showcase the talents; we also need to solidify what is going on in the classroom. It is going to be the academic success, maybe through the talents, which will make a difference, certainly for the adolescent.

LEVINE: I want to pick up on two points there. The first two cases here both show children who have fallen into a state of "peer tyranny," which is when the peer group has taken over totally in terms of providing any meaning to their lives whatsoever and any reason for existing. It is all in the peer group, and that is clearly a mixed blessing.

I arrived in New Orleans the day before yesterday and went for a walk around the warehouse district, apparently soon after school got out. I was watching adolescent males just wandering around on the street, and I said to myself, "They don't realize it, but they are displaying for each other." They are their own worst enemies. They are destroying each other. It looked as if each of them had reached the state of superhuman power as he was performing for the others, and

it was obvious that nothing else mattered but trying to act "cool" and "macho" for these other kids. It struck me that that was their life's total gratification. Not one of these boys had a book with him—they didn't seem to associate books with school. It is a real tragedy how they are going to wipe each other out in the name of loyalty.

I want to shift gears and get us back on focus to an interdisciplinary discussion. A while back there was a law enacted called "Public Law 94.142." It mandated that schools become clinics in a way they never had before. It revved up the role of the school as a diagnostic center. As schools developed teams, a lot of discrepancy formulas and regulations got superimposed over them and totally paralyzed school psychologists and others in their assessments of kids. Discrepancy formulas of various kinds that really didn't make any sense were designed to prevent too many kids from getting services, and psychologists were inundated with paperwork and no longer could do very much clinical reasoning.

The other issue that surfaced was that of conflict of interest when a school is evaluating one of its own students. Can a school say a child needs language therapy if it doesn't have a language therapist? Better not say that! So what kept happening within schools was that an assessment to see if a child is eligible for services became equated with an evaluation, and those are two different things. A child who has been tested to see if he is eligible for services has not been evaluated. He has been tested to see if he is eligible for services. There has been colossal misunderstanding about that.

Outside independent evaluation teams evolved to provide more objective evaluations, but those teams haven't been free of difficulty either. They have been expensive, and a lot of times the team has its own referral biases that are just as strong as an individual referral bias. For example, if a child goes to an ADD clinic, what are the chances he is going to come out of there without having a diagnosis of ADD? He has been evaluated by a team, but that team is very, very biased in its orientation, or they wouldn't have named the clinic the ADD Clinic, which, by the way, I think is a terrible name for a clinic, especially one that is trying to make a decision, if the decision is in the title. It's a bummer.

As you can see at all levels, it is easy to talk about multidisciplinary assessments in terms of quality control, cost effectiveness, and the freedom from disciplinary and financial and political conflicts and interest. But it is very, very difficult to operationalize all of this.

Kornblet: For reasons that Judge McGee talked about, twenty years ago the school was seen as one of the places for many kids with disabilities and suspected disabilities to get help. The problems that brought special education into being remain in our school system. Regular education fails to see how kids function as whole children. A lot of us fail to treat children with respect. There is a tremendous lack of teacher training. There is no training on how to work with parents, look for particular problems within the classroom, or access pediatricians and other child specialists.

The multidisciplinary team is required by Public Law 94.142, which is now called IDEA (Individuals with Disabilities Educational Act). The reality around the country is that many school systems are not in compliance with IDEA. The law itself reads very clearly. Without the special education laws, we would go back twenty years. Lots and lots of children and their parents would be in trouble. Some of us can afford to go to outside hospitals or clinics that are set up for a child

to get a full evaluation. The majority of parents cannot afford that kind of thing, so they have to go back to the school for this service. It is up to the community, parents, professionals, and the school, to make sure that multidisciplinary teams in schools are the best that they can be.

DICKMAN: Certainly we do have IDEA, and we do have rights. One of the problems with the way the law has been implemented, however, is that it is implemented as an entitlement. As a result, it has driven a wedge between the school district and the family. It has put the parents on the wrong side of the table. It has put the parents on the consumer side of the table. The child should be on the consumer side of the table, and the parents and the school district should be on the provider side, working together to provide an appropriate education for the child. Like so many laws, it is not going to work unless the parents and the school district work together successfully. A lot of the blame for this belongs to the school district because they don't recognize the tremendous potential the parents have in helping them do their job. If they did and if they exhibited the kind of honesty and openness that is necessary to gain the loyalty and respect from the parents who are involved, the parents would also adjust their expectations for their own child. The parents would move over to the provider side of the table. That must be a very important focus for the future, as far as education is concerned. Otherwise, we are still going to have this combative atmosphere every time we try to develop a program for a child with a disability.

THOMAS: First, I would like to make a few comments regarding the cases of Ramona and Greg. No one ever pinpointed the breakdown points for Ramona. Ramona has some significant and specific memory problems—active working memory problems, convergent retrieval problems, simultaneous retrieval problems—that need to be identified and then managed with specific strategies. These and other factors for Ramona have been overlooked. It is no wonder she became bored. "Bored" is the word children use when they simply can't do any more. Most of them are not really bored; they are tired of trying and not succeeding. Greg had significant language issues that were never identified and therefore never managed. Instead of being described as a child with a language disorder, he was misdiagnosed with a lot of other deadly labels, including Oppositional Disorder, Conduct Disorder, and Anxiety Disorder. Greg also placed some deadly labels of his own on himself—"born loser" and "retard." Isn't it possible that these labels are describing the results, not the causes, of his problems? It is a very natural reaction for a person to finally say he is not going to try something anymore that is so immensely frustrating. Once again, the need is underscored for assessing a child by looking first at his strengths and then by looking at exactly where the problems are so that a management program can be designed for that child that is exactly for that child's needs.

Secondly, nowhere in either of these cases did we see much interaction with the child. So often in my experience, I find the child left out of the whole process, when in fact the process is all about the child. The child so often holds the answers we are looking for, if we would just ask the right questions.

LEVINE: It is really possible that many of the learning disorders that children have aren't nearly as malignant as the misinterpretation of themselves and the misinterpretation of themselves by others. To grow up misunderstood may be far more dangerous than to grow up with a language disorder. I think that is implicit in

these cases. If these kids don't understand themselves, and they are really not understood by the adult world, that is dangerous.

It is also important what you implied about the child needing to be a partner in the team. It is remarkable how much a child can become a partner in his own management once she or he understands what is going on.

We will open up to questions from the audience now. It would be helpful if you would identify what you do for a living, if anything.

Questions from the Audience

Question: I am a social worker in the FINS (Families in Need of Services) program with the court system. What is going to happen to Ramona now?

Answer: VAIL: Ramona is going to keep going on the track she is on right now because it is very socially rewarding, unless people get together and jump in and help her with her issues with memory. It appears to me that she also has trouble with abstraction. She is very good at more concrete things. We need to get some ideas from the art and physical education teachers. We need to bring in all those teachers who are generally considered, unfortunately, the "extras"—the ones who don't usually count as much as the math teacher. We need to help Ramona by putting together that kind of multidisciplinary team. We need to look at these issues of memory. They all seem to cluster around her memorizing things that are not anchored in meaning or connotation. All this is part of forming a treaty—bringing in teachers other than simply academic ones.

THOMAS: If we were to do a descriptive evaluation of Ramona, and then explain to Ramona where her strengths and breakdowns are, Ramona might be more willing to start working again. We could help her understand—that is demystify—her problems. Ramona certainly is not hopeless. She will continue on the same track if no one intervenes, but if her strengths and problem areas could be explained to her, her family, and her teachers, followed by some good management, she certainly could become more successful.

HALLOWELL: It is almost invariable that if you can show Ramona, in rational demystified terms, how she can do better and also underscore for her where she is already doing well, she will respond. Kids want to succeed. It is up to us as teachers and parents and providers to be showing them the keys to succeed, and that includes specific examples pointed out in very concrete, practical ways. Kids, much more than adults, are turned on to trying new ways if they work. They give up when they experience repeated failure.

LEVINE: In the best of all possible worlds, when we intervene at this age with a child like Ramona or Greg with well-established patterns of failure and peer tyranny, it is going to take a while to see results. We are not going to sit down and have a talk with Ramona and find her going home that night and starting to function. It takes hanging in there. We may not see any results until she is in the eleventh grade, but we can't give up. We must be very, very patient in working with these children, not expecting immediate gratification.

McGee: We need to make sure Ramona gets a good art education, hooking her into something that is a success for her. First, get her to do something successful that is not self-damaging. Sneak up on her later with some other educational program to deal with the deficits. I suspect we are dealing with one of these left-handed, right-brained people, and we are trying to put a square peg in a round hole.

Hallowell: As a left-handed person, I have to put my square peg into this round hole! It is a fetish of mine to see who is left-handed. I notice Mel is left-handed, too.

The notion of the long-termness of this work that Dr. Levine mentioned—these days in the mental health field especially, everything is short-term, everything is overnight, "give us a quick solution," give us a medication, give us a "quick fix" because that is all we have time for, and that is all we will pay for. It is just not in the nature of this kind of condition that a quick fix works. I trained at Massachusetts Mental Health Center in Boston where long-term therapy meant many years, and it's no accident that Massachusetts Mental Health Center is in the process of disintegrating and closing.

I think the principle, particularly with these kids, remains that they need a long-term program and a long-term relationship with one person who will follow them through it all. That can be a pediatrician, a teacher, or a speech-language specialist. That person has to be able to stick with them through thick and thin over the long term. One of my old teachers said, "You will see more action in a rose garden than you will see progress in the lives of your patients." This is not short-term work; it is not crisis intervention, even though many crises do occur.

Levine: Long-term management is a very interesting and important model, and it doesn't have to be complex. For example, I have an army of children that I have been following for more than twenty years now. I see them two or three times a year, and I am available every morning by telephone as issues come up. It doesn't cost anything to call me. I am constantly writing letters to people about them.

Hallowell: Even if you only see them two or three times a year, they know you are there, basically, every day.

Levine: That's correct. So it is an inexpensive model, but they know there is someone there who is not judgmental and who is basically on their side. I even tell them at age nine, "It is going to be really fun when we sit down and talk about what colleges you should apply to, and I can't wait to write a letter to help you get into college." I am cementing this relationship and long-term support. It isn't expensive and intensive like the old Massachusetts Mental Health model, but it is dependable and consistent. I can tell you that I see amazing results. I got a letter recently from a kid who is in basic training at Fort Benning, Georgia, who was incorrigible and rotten when he was fourteen years old. I got depressed every time I saw him. He wrote me a letter about what he is studying at Fort Benning. He said, "I was parachuting the other day, and I realized, in the middle of the air, that never at any point that I knew you in the past did I ever say 'thank you.' So that's why I am writing you this letter—to say thank you." This was a kid who was totally rotten every time he called me when he was younger.

Dickman: I want to make a comment about Ramona's perception that she is socially successful. It appears that Ramona, and a lot of children like Ramona, choose communities that they can be successful in. That doesn't necessarily mean that we perceive them as socially successful. Certainly social success is important

for success in life. There are some children I have seen on the streets in New Orleans who believe that they are socially successful, but it is a misperception. To correct it requires that the child be involved in the assessment of their needs and their breakdown points.

Question: My name is George Ellis, and I am a pediatric opthamologist. Often when parents come to see me, their child has either been through vision training, they have questions about vision training, or they have questions about Scotopic Sensitivity Syndrome. Have any of you ever found a child who benefited from vision training or from Irlen lenses or glasses for Scotopic Sensitivity Syndrome?

LEVINE: Or has it ever failed?

Answer: THOMAS: I am not an "expert," but I can respond on a personal level. Several years ago, vision training was recommended to us by the principal of our son's kindergarten. We sent my son to an optometrist for three sessions of vision training. It was one of those desperate moves that we as parents sometimes do in trying to find help for our child. After two sessions, our son related to us that the eye exercises made him feel "really funny," so on the third session I asked the optometrist to let me try the exercises he was having my son do. After trying them, I had to sit down for about twenty minutes because I couldn't focus well enough to drive home. Needless to say, we discontinued the therapy. Vision training falls into the controversial therapy category. Perhaps it helps a child here and there. For us it was not at all useful.

KORNBLET: The Learning Disabilities Association has gotten many requests from parents and eye specialists around the country. LDA's official position is to explain what vision training and Irlen lenses are offering, and to caution parents to be particularly careful. As with anything, I think especially in the lens area, these treatments are incredibly expensive. We still have parents who swear that they have helped their children, but we have heard from just as many parents who feel like they have been taken to the cleaners. LDA has some specific information on that.

DR. ELLIS: Do you also have specific successes reported in that information?

KORNBLET: I would not classify them as successes. We do have testimonies from parents that say that they have helped their kids. These testimonies, however, come from the people who are selling the therapy or lenses themselves.

HALLOWELL: We are all being so polite about this. Let me, as an impolite person, say, as far as my experience is concerned, it is just a bunch of baloney.

BALLANCO: It is sometimes a phenomenon that when you try something new, it works for a little while. Sometimes just the act of doing a new intervention helps a child stabilize and improve for a little while. But as we continue to monitor, we realize the intervention has become ineffective. It was only the added attention that put the child on special notice. Many new interventions may work for a little while, and then begin to stumble and fall on their faces if they are not well-grounded in research.

LEVINE: You know, it is part of a broader, hidden drive to oversimplify the subject—to take what is a very complex, multifaceted set of issues, and reduce them to a lens, and that is just irrational. It is important to point out that research stud-

ies shouldn't be done by people who are making a living doing the interventions. When it is, we really have to worry about the data because it is unlikely that someone is going to want to put themselves out of business with a study.

Question: My name is Derek Mitchell. I am a fifth grade teacher of a self-contained classroom. I want to know to whom the focus of your message of an interdisciplinary team is aimed. Is it aimed towards parents most specifically, or teachers, or administrators? Who would be the most effective courier of the message in an interdisciplinary team?

Answer: **Ballanco:** School administrators must take responsibility for the quality of what they accept from consultants. If a teacher, at the end of reading an evaluation, says, "I don't know what to do with this information," the administrator should ask the persons who did the evaluation to come in, not in an adversarial manner, but to interpret this important information. The school needs to be able to use it. We want to set up a meeting so we can explain to teachers what this information means in terms that they cannot only understand, but also translate into use in their school.

Levine: Any other versions of that?

Thomas: The focus of the message of an interdisciplinary team needs to be directed to all of the persons involved. The parents, teachers, administrators, and child all need to understand and use the message, and continually communicate with one another. In a sense, all need to be continuous couriers. Until that happens, we are not going to have anything but a blind-man-and-the-elephant scenario.

Sands: The report is for all of those people. I think the question is not just who is it for, but how are the different people going to use the evaluation? That is, how can we help this child to succeed?

Levine: One of the ways this can happen, and by the way it is a tall order, is that there needs to be massive educational programs for teachers, administrators, parents and even children so that they can use this information. If we give a bunch of suggestions to a classroom teacher and the classroom teacher doesn't really see the rationale for the recommendations, it makes it that much harder to implement. An enormous public awareness or educational campaign absolutely has to be launched for this kind of information to be effective. Were we "spot on" on the courier?

Derek Mitchell: I guess that as a teacher, I feel like the lead driver in this mad caravan. I sometimes feel that the teacher is least effective because you only have these thirty kids for a certain amount of time. We need reinforcement from the parents, and we need administrators to understand that the standardized testing isn't the way to get these kids to where they need to go.

Levine: We sympathize with you!

Vail: Very often when the evaluation is done and the information is parceled out, the teachers decide what they ought to do, and the parents are told what they should do, but the passive participant remains the student. It is very important as part of the evaluation process to build what is called a treatment alliance where you get active involvement from the child. Say to the child, "These are the accom-

modations which the school is going to make, and these are the accommodations your parents are going to make. Let's bargain together on the accommodations that you are going to make." The evaluation should lead to the child being able to do more, rather than an evaluation being something that is done to him. We need active involvement.

Comment: I work for the Jefferson Parish Human Services Authority. I am a social worker who primarily provides in-home and in-school intervention therapy for children and their families. First of all, in my experience, collaborative evaluations and multidisciplinary teams generally don't address multifaceted aspects of the child's life. They don't address things like what does this child do for recreation and what recreational outlets and opportunities are available for this child. They don't address the ways we are going to help this child develop pro-social peer groups. You mentioned peer tyranny. Studies show that delinquent peer groups are a major indicator of whether that child is going to be in the court system.

My second comment is that often we have evaluations that recommend tutoring. This child needs specific tutoring; this child needs specific remediation. Instead, we plunk this child into a generic program and attempt to fit the child to the program, rather than fitting the program to the child.

LEVINE: Those are very interesting and important comments.

Comment: My name is Nadine Robbins. I work at Children's Hospital with the Family Support Program and also with a pediatric opthamologist. I have come for the last three days to this summit as a concerned parent. The summit has opened up a wealth of information to me. I have a seven-year-old son in the second grade with a learning disability. I agree with you wholeheartedly about teachers needing to have more training available to them. I commend all the teachers and principals who are here, and the fantastic job that they are trying to do with our children in school. I know my short journey with my little son, however, has been very frustrating, particularly dealing with his kindergarten and first grade teachers. I am asking that teachers listen to parents' comments about their children. We can't learn everything there is to know about children from books. Listen to life's experiences. I have observed some things about my own child, things that I have spotted from pre-K until now, and I am trying to let the teachers know. One teacher commented that, "I think, Mrs. Robinson, that you are looking for him to be an 'A' student." That is not what I am looking for. Just see what I am seeing. Maybe he can become an 'A' student; who knows? His second grade teacher is a teacher that we will never forget because she has taken the time, first of all, to listen. She has spotted some of the difficulties with our son, and she has been working tremendously well with him. Effective collaborative management must involve the parents. Please listen to the child and to the child's parent.

LEVINE: We hear you loud and clear.

Question: All week we have heard comments that there needs to be a plan and a focus and not just medication. Is there some way that the schools can work with the doctors and help create a plan that everybody has to follow, and not just have the parents think that this pill they are being given will be a cure all? How can we create this plan? As teachers, we can't force these parents to do things. It seems that all the

parents are doing is sending a pill to school. There is no follow-up. Can we require the doctor not to refill the prescription unless there is a plan in effect?

Answer:

BALLANCO: It is important for the professionals who deal with families to take into consideration the wants and needs of the family. Although it really tears my heart out, sometimes I go along with what the family wants to do, but I try to make it so that the family doesn't get involved in a major mistake. I find that if we take a confrontational attitude to a parent or child and start to act in an authoritative manner, all we get is a lot of resistance and no cooperation. The art of negotiation requires that we listen to the other person's side, ask them their opinion, and begin to develop some common goals. When a person in authority says you will (or you won't), it starts to cause all kinds of problems and hard feelings.

LEVINE: As we define standards of practice, it ought to be considered totally inappropriate medical care to provide medication without a thorough evaluation and follow-up, so that it doesn't fall on the teacher to have to tolerate the level of frustration that you are describing. I do think you have a moral obligation to speak up, and go on record to say that you think a lot is being missed, and this child is not being properly understood. And you know, if that causes you problems, you could find another job!

TEACHER: I don't want another job!

SANDS: Your question brings up one of the major problems. The point you are making is that you won't get involved until it is already three steps too late. The teacher needs to be part of the evaluation process, and part of the decision-making process about appropriate treatment. Is it going to be medication plus adjunctive treatments? Are we going to use the medication short-term to help the intervention work? That information needs to be involved in the decision of whether or not to start medication. Once medication starts, how are we going to follow up? Whoever is prescribing the medication needs to tell the teacher and the family what the positive and adverse effects of the medication are and how we are going to monitor it. The problem is really twofold. One, sometimes, as Dr. Ballanco pointed out, families really don't want the school involved in some of this. Often the reason is that they are embarrassed. They don't want to bias things against their child. The second piece is being able to look at the issue of how having this child on medication affects the school. Having a child in school on medication raises all sorts of new liability issues that weren't there ten or fifteen years ago. Putting together a whole team so that everyone understands and communicates is important so that when there is a problem, the teacher knows, for example, that at 8:00 in the morning he can call the office and talk to a doctor like Dr. Levine. Information has to be shared back and forth.

LEVINE: Thank you. I have to call this session to a conclusion. Thank you all.

CHAPTER 12

National Issues/National Focus

Open Dialogue

MODERATOR

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Levine: I begin by pointing out that there may be a little tension here, as a great deal of what we have been talking about in the last two days runs contrary not only to current policy, but perhaps even more alarming, to currently advocated policy for the future. This is to say that a lot of what people are talking about in Washington in terms of educational reform and improving education is being totally contradicted by what we are saying here today—we are swimming upstream, so to speak.

Let me dramatize that by bringing forth our first issue, which is the potential conflict that exists between the drive toward uniform academic standards, such as uniform proficiency in Algebra as a graduation requirement; that is, having every kid in a region, a state, or perhaps the United States be required to take the same competency test to determine if he or she is competent, at the same time that we are talking about the diversity of children. We are having to deal with policy that is constantly based on the assumption that every child in America needs the same thing, needs to be good at the same thing, and needs to demonstrate competency in the same way. I perceive that as a conflict between uniform standards and the rights and needs of students who either choose to be, or never even chose to be but just are, different in their wiring. What are their rights within a system that is trying to elevate standards?

Let's begin with a quick vignette. In the state of North Carolina, it was decided that no child should be permitted to graduate from high school without demonstrating competency in Algebra. I was asked by the state legislature to be on a committee to review that requirement to which they were quite firmly committed. (I don't know why they decided to have a committee since they were going to implement it anyway.) At the first meeting, I asked the committee members to tell all the different ways Algebra had influenced their lives and their careers. They didn't want to do that, but what they did say was that by having kids demonstrate competency in Algebra, they could be very sure they would graduate a generation of kids with good problem-solving skills. They had heard from some business people that a person had to have good problem-solving skills in order to succeed in the business world, and that a person learns problem-solving skills in Algebra class.

I fear this is a prevailing mentality now: using these kinds of criteria and blanket group statements to dominate our policy. So, first, I would like the panel to speak out in favor of the Algebra requirement, or its equivalent.

Dickman: As far as competency tests are concerned, the question is, "Competency for what?" I think we are all interested in creating a successful child—a child who is going to be successful in life. One of the questions I asked a group of teachers quite awhile ago was what was their conception, in one or two words, of what makes a successful child. Their answers were "happy," "self-confident," "cooperative," "motivated," "popular," "creative," "resourceful," "organized," "self-directed," "caring," "good self-image," "not afraid to accept a challenge," "competitive," and "good at Algebra." One of the questions I often ask audiences on this same issue is to name the three or four or five most important things they learned during their high school years. No one responds with "Algebra" because they are thinking about what has made them successful personally in life.

Certainly competency tests do not determine whether or not a person is going to be successful in life; only whether or not a person is going to be success-

ful in Algebra. The goal, I think, for our educational system is to create a child who is going to be successful in life, not necessarily in Algebra.

Steeves: If you are going to say that you don't need Algebra for life, then we have to go right back and ask why we are teaching it in school anyway, and should we do away with everything in school that we don't need in life? If I take the list of adjectives that the teachers gave Emerson Dickman, surely I want happy, successful, self-directed, motivated individuals, but I don't want them at the end of their school lives to be successful in being a person and yet know nothing. We have to go right back to what we are teaching in the schools and what standards for success we have for these subjects.

There have to be multiple ways in which students can show their achievement and their competency. We need to look at those kinds of issues rather than "doing" Algebra. If we teach Algebra, we expect our kids to be competent at the end of it. If we don't teach Algebra, then we don't expect them to be competent.

But we are missing a step. Children who say, "I do not want to learn Algebra. I have no interest in Algebra; it is not going to help me in life," should not be in Algebra classes. Children who are in Algebra classes need to learn what they are taught, admittedly, in the way in which they learn, and they need to be able to prove that they know the stuff, in the way in which they can prove it.

There have to be standards, but what goes before that are the choices within the school curriculum, rather than do we need Algebra to graduate. If children are taking Algebra, yes, they should have Algebra to graduate; if they haven't taken Algebra, then no. And if they don't need Algebra, then why take it? I see kids in Algebra class who are bored, miserable, and unhappy, but it is not the Algebra that is at fault. The system that put them there is at fault. I love Algebra. I am the kind of nut who would, even in seventh grade, take two or three pages to solve an Algebra problem and love it. I thought it was great fun. I can't draw, but I don't feel unfulfilled or unsuccessful or unmotivated because of it.

Stoner: Being a former elementary school teacher and being married to a calculus teacher, and never having understood Algebra until the last few years, I have to tell you the fault is not with Algebra; the fault is with the way it is taught. Those of us who are clearly more performance-oriented tend to think that geometry is very concrete and Algebra is very abstract, while those like my husband, the calculus teacher, think that Algebra is very concrete and geometry is very abstract. There are two minds; if we can find a test to determine which of us are which way, we can channel certain kids into a more hands-on way of learning Algebra. There are some programs now that teach Algebra in a hands-on way that are outstanding. I must add one more thing to the curriculum that kids need to have before they graduate and say everyone has to show performance on a stringed instrument such as a violin!

Levine: I am glad you said that because I don't want to focus just on Algebra. We could have used foreign language as an example, and we could take a number of other prototypes. The question is: "Should everyone have to be good at everything?" Or at least adequate at everything?

There are two issues: one, exposure to the content, and two, how does a student get evaluated on exposure to the content. These are really important policy issues. What if you are unlucky enough to be a child who has some real strengths,

but these strengths don't correspond to the courses in school, and no one is going to look at your competence?

JACKSON: I am one of the folks in Washington who helps set the policy that you are talking about as being inadequate. I would like to explain why we think looking at something like Algebra and minimum competency is important. First, I hope that the message that I am hearing today isn't an expectation that children with learning disorders or any other disabilities are not able to learn to high standards. I think they are. The point that it is not how it is learned but how it is taught is critical. That is something those of us who are regular education teachers need help with—to learn to teach children with special needs in a better way. The world is becoming increasingly more complex, and the situations that children are being asked to make decisions about in their early years as well as in their adult years are increasingly more complex. We have to find ways as educators to help them learn to be good decision-makers. Algebra is one entree; it is not the only entree. Minimum competence is one entree; it is not the only entree. If you think the standards are wrong in your state, then you ought to be up there talking about what the right standards are. The federal government says all children can learn to high standards because in order to compete in the world they need to be able to do certain things. We might want to debate what those things are and how competent "competent" is, but I would hope that the message isn't that the students you teach can't learn to high standards because I think they can.

LEVINE: Should everybody be able to learn everything to high standards, or should different people have different competencies that they demonstrate?

JACKSON: Everyone has propensities, affinities for certain things, by their nature, by the way they have been brought up. Everyone isn't going to learn to the highest standard in every subject, but everyone can learn to the minimum standard. The standards we are talking about are the basics that people ought to know and be able to demonstrate in order to make their way in the world. We are talking minimum, not maximum.

CRAMER: One of the issues we believe has dogged many children and adults with learning disabilities is the issue of low expectations—teachers and parents believing and being told that their children cannot achieve. We hear from many adults at the National Center for Learning Disabilities who only in later life begin to succeed to their full potential. They were told in school, and by their parents and by other professionals, that they didn't have much chance of doing anything in the employment field. That is, someone we deal with now quite a lot is a person who was not identified in school with learning disabilities. This person ended up working at McDonald's frying hamburgers. His child is identified as LD, and he is then identified with learning disabilities. This person is now a Presidential Intern in Washington State. He is now beginning to live up to his potential. On the issue of standards, I would agree with Janice Jackson that they need to be set. It is not that every child is going to reach every competency, the highest in every subject, but if the standards aren't there, many of the children who are going to be placed in the low expectation category will be the children with learning disabilities, and that is something we would like to get away from.

EDWARDS: If the purpose of teaching Algebra is to teach kids how to problem solve, why don't we just teach them problem solving? I remember a teacher in a

high school where I taught, a teacher of physiology. She made these poor high school kids learn the Latin name of every nerve and muscle ending in the entire human body. Many of them failed this class. One day I asked her, "Why do you do that; why do you have them learn all of those names? They can, after all, look up this information if they ever need it later." She said that she wanted them to learn how to memorize. I said, "Why don't you just teach them how to memorize?" At some point we have to look at basic human competencies, and more directly teach them, rather than take this roundabout route that makes kids hate thinking in general.

DICKMAN: I am glad you went first, Betty, because that underscores what I was about to say. One of the weaknesses I find in our system of education is the need for quantifiable accountability. It is not a question of whether or not we should teach things, or whether or not we should expect minimum standards to be accomplished by our children; it is that we rely so much on the need for quantifying success in what we are doing for our children that focuses our teachers' attention away from these metacognitive skills that are necessary for our children to be successful in life—social skills, metacognitive strategies, executive function skills, and simple problem solving.

On a more global basis, our teachers are not told that they shouldn't teach these things, but they are told that things that they should teach are things that are quantifiable, that will result in a score that will show the success of their intervention, of the school's intervention, of the district's intervention, and of the curriculum's validity. That is wrong because our children need to develop these metacognitive skills.

WODATCH: My reaction to this debate comes not so much from what I do in terms of enforcing the Americans with Disabilities Act or Public Law 94.142 as a civil rights attorney with the U.S. Department of Justice, but as a parent of children who have been through an educational system that has had some of the problems of dealing with specific competencies and minimum standards. Just what is the purpose of an education in the elementary and secondary school systems? The concept that in an educational period of twelve to thirteen years we are going to teach children a whole series of things and then that is it, is what I see as one of the problems.

Schools, whether they like it or not, are teaching children how to exist with one another and how to deal with problems. For example, if a child has a teacher who isn't very good, how does that child deal with that as a student because a person is going to have to deal with that kind of experience later in life, in a profession or job, or in dealing with other people. How do you learn to coexist with people of different abilities and from different cultures? These are things that are done in the educational setting that are as important as learning to some minimum level.

A school system has to quantify something; that is, they have to decide what success is and how to measure it. What we have found is that people are very limited in what they are choosing. Teaching children that learning is important and how you go about learning when you leave the school system is important. Some of these are values that should be taught or inculcated at home, but the school system has a role in this. Learning how to balance a checkbook and how to make certain computations when purchasing things is as important as—or even more important than—knowing how to calculate such word problems as, "When two

trains are coming, one from one area and one from another, when are they going to meet?" The latter is, for sure, a form of problem solving, but not at what the school system should be aiming.

JACKSON: I would encourage you to have a conversation with people who are involved in programs like the Algebra Project, Equity 2000, or Tract. These programs are calling for teachers to teach mathematics in a different way. They aren't the only programs that are talking about interactive and experiential learning, but if you have a conversation with any of the folks involved in those projects, you find they are doing a lot of the things that you are telling teachers they ought to be doing. For example, in the Tract program, which is a transportation program developed by several states to involve minority students in engineering, particularly civil engineering and mathematics, there was a young child whose teacher said he was LD and that he could never learn beyond basic mathematics. That child is now doing architectural design more complex than most architects with masters degrees could do, and he is presently a high school student. Someone helped him engage and learn in a way that clicked with him. They are finding that when children do more interactive things, whether the entree is Algebra, English, or something else, if it really engages children, it works.

LEVINE: One of the implicit issues is that as we study the minds of children, we learn increasingly that there are incredible numbers of ways in which minds differ from each other. So much of the current research is showing incredible variations in different patterns of language ability, memory, cognitive conceptual abilities and so on—real specificity, very specialized brains. To what extent should we superimpose uniform expectations over a wide diversity of minds?

You clarified something very nicely when you said that it is good to have minimum standards, which is not to say we are asking everybody to be talented in everything. But then the questions become, "How do we deal with specific strengths? How do we offer multiple opportunities? How do we evaluate a child in terms of his ability to practice someone else's speciality?"

At some point we have to question this notion of well-roundedness for everybody, and recognize that there are certain minds that are going to be specialized pretty early in life. If we require them to practice someone else's speciality and if we judge them harshly on their ability to practice someone else's speciality, what is the cost of that for society? Does that frustrated child end up in the juvenile justice system?

Policy has to take this into consideration. We are seeing reactions to some of this in terms of magnet schools in different cities around the country that are meeting the needs of different kinds of minds. That acknowledgement of diversity desperately needs to play into policy. Does anyone want to comment on that in terms of how that could be operationalized?

VAIL: An existing model which has been tremendously successful and which has also attracted a large amount of money is the effort by Theodore Sizer at the Coalition of Essential Schools based at Brown University. Ted Sizer was one of the earliest proponents of measuring mastery through exhibitions and portfolio, and looking for habits of mind, such as curiosity and diligence. It is because of this (which plays into exactly what Mel is talking about) that Walter Annenberg has given $500 million for innovations in the public school system. Based on this phi-

losophy and with this huge surge of financial support, we can see help on the horizon.

Jackson: There are examples of schools that say to children, "You need to learn the most basic, minimum standards, and then begin to find out what your abilities are and what your aptitudes are." An example of that would be the Key School in Indiana. There are also many schools that are developing around Howard Gardner's multiple intelligences. We need to look at schools that address not only how we teach children and how children learn, but also how we assess it once we think that whatever we are trying to teach them has been learned. There are a number of people who are working on assessments that are not just quantitative but are performance-based, but this kind of assessment is difficult because it is often very labor and time intensive. But the College Board is attempting to work at it, and Harvard University is attempting to work at it—finding more ways for performance-based assessment.

Levine: Also implicit in this is the way in which educational reform can address the strengthening of strengths—these pre-existing strengths that we would like kids to have legitimized. One might argue that a significant aim for education, particularly in a highly specialized technological world, is to be sure that every child graduates from high school not just with minimum standards met in various areas, but also with a domain of excellence. To be able to demonstrate high competency and talent in one domain might be just as important as being able to meet minimal standards in a multitude of areas. There are models where people are working on that as well.

Do we have any other comments in this regard? If not, I would like to raise one quick issue called, "Whatever happened to vocational education?" It has interesting implications in all of this. As a clinician, I certainly see an awful lot of kids (including the case we discussed this morning about Greg) who really are very specialized and could thrive if they were given opportunities to pursue a vocation early in life. There is a way of providing a new kind of vocational education in which it is possible to pursue a vocation without lowering the level of aspiration. This is to say that if you are really into cars like Greg, included in your vocational education ought to be a tremendous amount of exposure to the possibility that you could open up a chain of car repair shops all over America, or that you could rise up the corporate ladder at General Motors because you are interested in cars. I had one kid who once said to me just recently, "I like cars but I don't want to be a 'wrenchie.'" Until then, I had never heard the term "wrenchie" (someone who is going to spend his life with a wrench in his hand). Why does loving cars mean a person has to be a "wrenchie"? There are so many incredible things a person could be doing with a love of cars. In the past, a lot of vocational education has been a way of writing kids off, but I think it could be presented and taught in a way that it is uplifting and where, in fact, we could see a high level of ambition. Those of us who deal with so many heartbreaking kids who are not being able to pursue their passions long for that opportunity.

Hallowell: I strongly agree with that. Somehow we have lost a sense of what learning is all about. All education ought to be vocational education. What is the opposite, liberal education or useless education, irrelevant education? I think that it goes back to what—

LEVINE: Avocational education!

HALLOWELL: Avocational education!

LEVINE: I could have had an early course on geese farming! It could have been really valuable!

HALLOWELL: I go to back to what I was talking about the other day about Horace—to instruct by pleasing. If we go where the child's interest lies, be it cars or books or whatever, as long as it is safe and legal, that is where we get a start. My father taught me a lot about this. He was an elementary school teacher in New Hampshire and specialized in reading disabled children back in the fifties when those kids were basically called "stupid," and he knew they weren't stupid. Most of them lived on farms. He would talk to them a lot about tractors and farms, and that is how he would get them into reading. He would have them bring in tractor manuals and seed manuals and stuff he didn't know anything about, but that is what they would read and use as their reading textbooks. He said, "This is how I will get these kids to read." The other thing he would do was to bring in National Geographics that had pictures of naked women in them, and that would interest them, and the School Board approved National Geographic!

I think that it makes all the sense in the world to use a child's affinities, and the case of Greg was such a wonderful example. Some children have very specialized domains of excellence. To use school as a way of keeping them away from that is so obviously the wrong thing to do. We need to have a policy that is flexible enough to let us do what is obviously the right thing to do.

JACKSON: First of all, there is a process in terms of policy that the federal government has around vocational education and that is School to Work. The School to Work Transition Act is one that encourages all children not to learn just "the academics." At the end of a child's twelfth grade year, they ought to be prepared to have the choice to go to work immediately or go on to higher education, whether that is vocational training, a community college, or a four-year college. If you want more information, contact the Department of Education for more information about School to Work. There is money available to help with exactly what you are talking about—how to start with what they are comfortable with.

However, I do have a bit of concern as people jest that kids should be able to start with what they know and are comfortable with. If this young man that you talked about this morning is interested in cars, then perhaps he could go on to have his own chain of car dealerships or car repair companies You don't run a repair company because you know cars. You have to know cars; you have to know business; you have to know people. There is a whole lot that you have to know. So the entree is that he likes cars. Where we have to take him to is how to run a business.

LEVINE: Absolutely. That is the idea.

JACKSON: I have to say one last thing. I have a bit of concern as an African- American that there are many children of color, poor children, and children with language disabilities who are funneled into special education classes because regular education teachers don't know how to deal with them. It is critical that we expect as much of those children as we expect of the children who are in regular education, and that all of us work together to find ways to help them develop.

STEEVES: I was a minority student in the dark ages when I was educated; I was what was called in England a "scholarship child" because we didn't have any money. I won a place in a convent high school, and I will be totally grateful to my first teacher there, Sister Ann Theresa, who said to all thirty of us in her class on the very first day, "Every single one of us is different, but we all have to learn this first day the true meaning of education. We are going to start our Latin lesson by looking at the meaning of education, and it comes from Aduceri 'to lead out.' I am going to try and lead you out of yourselves to be the best you can be." This idea of individualization is not a new idea, but we as individual teachers can do a great deal in our individual classrooms to lead those children out. Janice is right. We know something about teaching. We have to find out about learning. Then we have to draw the children out to be the best they can be. It is difficult, but it will work. I learned Latin, and I loved it. I learned Algebra, and I loved it.

LEVINE: Why couldn't you learn to draw?

STEEVES: I still can't draw, except a Scottie dog.

EDWARDS: Oh yes you can!

STEEVES: I don't even have minimum competency, Betty.

MCGEE: You read Betty's books, and I guarantee you will learn to draw!

STONER: With vocational education, one of the tragedies is that we have gotten too far away from apprenticeship programs and made many vocational programs where a student has to be able to read well in order to read the program's textbooks. The student has to sit through lectures rather than actually doing hands-on kinds of things. This is difficult for a child who is mildly reading disabled and two to three grade levels behind by the time he reaches middle school or high school. If a child is that far off from where everyone else is in the class, he cannot take meaning independently from those textbooks. To put kids into vocational programs where they have to turn around and use the skills they have least developed to get information puts them at a continued disadvantage. I would like to see us get back to apprentice-type programs.

LEVINE: Excellent.

MCGEE: You know, if we had some good alternative vocational educational programs early on, I would see far less kids than I am seeing. I agree with Joan. I am told I cannot get a kid into a vocational education program unless he is sixteen years old, and he can pass the GED or graduate from high school. That is his problem. He cannot at this point in his life. It's a "Catch 22" situation.

LEVINE: I for one would like vocational education introduced in the elementary schools. It should begin as early as possible. Again, not writing a child off, not eliminating other competencies, but giving these kids a chance to pursue something they find attractive that gives them a sense of what they could be some day, as opposed to having no sense of what they might be.

JACKSON: Again, that particular policy in the federal government is called School to Work. It is in its early development stages, so this would be an opportunity for you to get involved in developing what School to Work could be.

LEVINE: Excellent. Let me move now to another national policy issue, one that is a little more special ed. than regular ed. It's the labeling categorization of children. I

just spent a very interesting morning with Tom Hehir, who is in charge of the Office of Special Education in Washington. He was lamenting the fact that we seem to be getting more categories, not fewer categories, and that there are four new ones apparently. Many of us who work with kids day in and day out wring our hands over the inadequacies of the labels and the potential dangers of self-fulfilling prophecies implicit in labeling a child something for life. So I am interested in alternatives to labeling and how alternatives to labeling can work, or not work, and what their implications are in the real world. Does any one on the panel want to comment on that?

McGee: I really detest these labels because I get them all the time in court. They are BD, ED combinations...

Levine: They all have "D's" in them, which make them easy to remember.

McGee: They seem to have a "D" in them, representing something like "damaging to the child." But whatever it is, why can't we sit down, and in a simple paragraph describe to whomever needs it—the physician, educator, judge, or whoever would need to know this—that here is Mary Jones. I have examined Mary Jones, and she has strengths in these kinds of areas, she can do these things, and she has some problems in these kinds of areas. This is a narrative description at this time in Mary Jones' life because Mary Jones is eleven years old. When she is twelve years old, she may have different strengths and challenges that we will uncover and at that time describe in an intelligent way to whomever needs to know who Mary Jones is. This approach would be much more effective than putting these labels on a child. Also, part of the reason why labels are there is that they are driven by funding. If the school system happens to have money for LD, BD, or ED at that time, OK, the system shoves the kid into that hole. It is as if we have about five pigeon holes: the kid isn't LD or BD; he's kind of, but he doesn't go in pigeon hole A or B, so let's shove him into pigeon hole C and label him something. As we cram him in, parts of him fall off. Instead, we could look at it like a smorgasbord and say Mary Jones needs these things and these things. Let's pick from the smorgasbord of education and give these things to her.

Levine: If you went back and looked at the three cases we had this morning and tried to decide who is LD, BD, or ADD, it would be a real travesty. There is an implicit connotation in many of these labels that if you have one, you can't have anything else. In other words, if you have attention deficits, it imparts immunity from emotional disturbance. In the real world, if you have one thing it is likely that you have a cluster of stuff. Comorbidity is the rule, not the exception.

Hallowell: I'd like to underline that point. We all can agree here today that labeling is artificial and restrictive and serves no one. The narrative assessment is so much more useful in terms of understanding a child. What is the problem? What are the target symptoms? What are the breakdown points? What is this little girl or boy like in class and at home? That is how we need to approach it instead of sounding like some kind of sexual fetish, BD classroom. ADD is something that I happen to specialize in. As I said on Wednesday, I don't know what ADD is; it is not an "it" for sure. It is a "they." Many, many syndromes are subsumed under the ADD initials, and we ought to just acknowledge that and say we don't really know what we are talking about. The good news is that we are learning a lot about the brain. Let's focus on symptoms and descriptions in the English language

instead of a lot of mumbo-jumbo jargon that intimidates and confuses everybody. I think we all agree on that.

STONER: The present assignment I have at the Menninger Clinic under an Annenberg grant has permitted me to sit on what I call a true interdisciplinary diagnostic team. I am not exactly sure how we can recreate this in public schools. When we look at the child and the child's difficulties in many areas, and when I see the piece that social workers bring to it in terms of the geneagram of the family, I am thinking what a neat thing it would be if we created geneograms academically.

LEVINE: It would be nice to know that a descriptive analysis would unfold a description of a child with a problem with phonological awareness, so we would know he is going to need help with phonological awareness. That help may be within regular classroom accommodations, or it may require language therapy, depending on the severity. But a problem with phonological awareness early on may not create a discrepancy until there is so much secondary grief that it is going to be much harder to manage.

DICKMAN: We call that the threshold of failure. You crossed the threshold of failure before you got the services.

LEVINE: You know, so often in my career it has been very common for a mother to come in with her eleven-year-old daughter who is getting "B's" in school. I am really annoyed that she is bringing this kid in for an evaluation, and I get irritated at this mother before I ever meet her. Then I evaluate the child, and I know just what she is talking about. She is saying, "Can't you help her before she fails because I don't think we are going to be able to help her after she fails. She is on such thin ice." Again, if we can identify the phenomena that begin to cause failure in second grade—they are there, very directly.

EDWARDS: The most pervasive labeling system we have in education is grading. This labeling system affects every single child. Some are labeled "A" students; some are labeled "C" students; some are labeled failing students. If we continue with this model of selecting out of the great population of students the so-called "A" and "B" students, then there is little we can do with the rest of the school population. In the old days, the "C," "D," and "F" students could go on to blue collar jobs and do quite well, but this option is rapidly receding. I believe it was Ted Sizer who suggested substitution of a success model rather than a selection model—every child will be expected to succeed in the most basic and most necessary skills. We would then do away with having a student who is failing in reading. This is a disaster in the making. We simply have to stop doing that. We've got to help that kid succeed in reading. If everything else goes by the board, we cannot go on with this pervasive labeling of children. Yet we just let it stand.

LEVINE: We need alternatives—especially in pediatrics. It would be kind of bizarre if every time we saw a child with chronic asthma we said, "You know, you are getting a failing grade in your health." The child doesn't have any control over that. To evaluate someone negatively because he can't do something is a bit of a civil rights violation in its own right.

I would like to move us along to a related issue called Educational Tracking. Tracking has to be an issue of discussion for kids that we see who are struggling. I am not an educator, so I am not going to take any stand on this, but I would be interested in how particularly educational people here see contemporary views on

the subject of tracking kids in slower classes or so called faster classes, depending on their academic status.

JACKSON: Tracking is a difficult subject to get a handle on. We have just finished a discussion on labeling, and tracking is a form of labeling. The difficulty about tracking is when we start talking about helping children shine where they are best, tracking helps us do that. Tracking lets us help kids who are in similar success periods move forward more quickly than those who are not where they are. The problem that comes with tracking is, first, that no child is excellent at everything, so tracking should not occur for any child all the way across the curriculum. Secondly, we often learn from people who are ahead of us at some point, and we learn from people who don't know as much as we do by the questions they ask or by helping them learn. In and of itself, tracking is neither good nor bad. It's how we use it. When we track children because they are good in math, and then say that they are good at everything else, or when we track children because they are good in reading, and we say they are good at everything else, we are making mistakes. They aren't good at everything. It is a rare child who is good at everything. When the tracking is by groups of children who are tracked by virtue of something that has nothing to do with their ability to learn, and they are told that they will always be in the low group, and once in the low group they will stay there for the rest of their educational careers, that is problematic. There are rare cases where tracking is appropriate. Sometimes in mathematics you cannot learn the second step until you have learned the first step. If a school decides it is going to use tracking anyway, it ought to give some very serious thought to when it is appropriate and when it is not. It is never appropriate for any child to be tracked either high or low for all of his or her career.

LEVINE: Thank you. Any other comments here?

STONER: The promise of 94.142 was that there would be a continuum of services available in the school, so a child who had reading difficulties could be pulled out into a very restrictive environment with just their reading skills worked on, without the peer group around realizing that this child was not keeping up with the pace of the others. This is not fast or slow, but a difference in the way instruction is presented. The reality in public schools, however, is that if a child is tracked in one subject, because of scheduling restrictions, the child often ends up being tracked in nearly everything else. If we could provide services so small groups of kids within the classroom could be helped by extra support people, so there is more than one teacher to form a view of the kids and different methods of instruction are introduced, that might alleviate some of the problem.

LEVINE: I want to move to our last topic before we open up for general discussion. It is an issue I don't think we can avoid, called resource allocation. This is a moral and policy issue which really has to do with an implicit message that's come through today. We've heard our judges, the last couple of days, imply to us very strongly that these kids need to be dealt with early on, or they are going to be very expensive to take care of later on. We are hearing a message that resources need to be allocated to these high-risk groups of children pretty early in life before it is too late. I don't know how you people see things moving in that direction, whether we are losing or gaining resources in terms of investment in children who are struggling, perhaps even before they start struggling.

WODATCH: I would like to start with the present climate in Washington for a change as it affects a number of these programs. We've dealt with a model for 20-30 years of the federal government setting standards or moving school districts in certain directions, and providing some funds for 94.142 with the idea of having an IEP and a continuum of services. This model, frankly, is under attack. The idea that students with disabilities should be integrated into regular educational classrooms is also under attack from teachers and their unions as well as politicians. There are some very fundamental decisions and thought processes going on in Washington that are very far removed from the debate you are having here today. They are whether the federal government should be providing these resources and dictating policies, and whether there should be federal statutes that say that children with disabilities should be provided with special programs. The level of debate is a very fundamental and primitive one in many of its aspects. The budget has to be cut, and we are spending money to provide these services. Should there be a Head Start program? Shouldn't we just give a block grant and let the local governments decide what to do with the funds? The discussion I have heard this morning is really very different from the discussion that is going on in Washington. At some point, there needs to be a meeting of these minds with yours because the viability of these programs is being questioned. Clearly programs can always be improved, but the level of discussion in Washington isn't how we fine-tune them; it's whether they should exist at all. Do we have the resources to fund them? There is a growing body of thought that they shouldn't exist and that the federal government shouldn't be determining these programs from a federal level or dictating that there should even be IEPs. I certainly hope that you as individuals and as organizations will join in this debate because it is starting now and will be going on for the next six months to a year. Not all of it is an unfunded mandates discussion. It is, " What is the purpose of education and what is the role of the federal government in its funding?"

CRAMER: As advocates we have really had to change our tune since November. Up until then we had been spending a lot of time talking to various Democrats and Republicans of subcommittees about changes in the implementation of IDEA to make it better for our kids. It was a discussion on detail, not fundamentally whether this act should be reauthorized. Since we've had more discussions with people on the Hill during the last few months, the discussion is now, "Remember what it was like before Public Law 94.142? Do you want to go back to that?" There are some enormous issues on funding that John Wodatch just brought to the floor. One of the things that we have been trying to do is take a positive tack and say, "Look at the issue of learning disabilities nationally in public education. Children with learning disabilities are 51% of all children in special education." That makes us high incidence.

Another issue that has dogged the field is what one expert refers to as the "Myth of Mildness." That is, a learning disability is just a mild disability that doesn't really affect that much. We know that simply isn't true. We are advocating ways that can be more cost effective. There are two areas in terms of advocacy that can be pushed with the Republicans in the House and the Senate that are going to fall on very nice ground. The first is early intervention. We are collecting figures to back up the argument that if we provide the services earlier at five, six, and seven, particularly in reading, than we should be able to save money down the road. The

second is that we should be putting more effort into teacher training so we make sure that those children get the help they need. Again, that will save money down the road in assessments and all those other areas we discussed. So in terms of advocacy, we've changed our marketing policy. We are looking at the aspects of funding, prevention being something that we can save money on. I certainly don't think all is lost, but it really needs everybody to get on the band wagon here. LD groups have bound together over the last few months to advocate on behalf of learning disabilities and removed themselves slightly from the whole disability group who certainly have different issues than we do.

JACKSON: I want to underscore the critical importance of what is happening on the Hill. I think it is important to separate the conversation that happens in the Department of Education from the conversation that is happening on the Hill. The Department of Education is trying to put forward similar ideas to what you are suggesting this morning—that we need to focus on classrooms and what is happening with children. I am hearing an assumption that LD children are only served by money that comes through the LD or IDEA authorization. That is not true. There are lots of children with special needs who are served by programs like Title I and various minority language funding sources. Title I tries to get the money to the highest number of kids who have language disabilities or are limited English proficient. There is a call to open that up by the present Congress and to redistribute that money to where it is more politically sound. This community should stand up and say we want the funds where the kids are who need the services. Also, we have at this time a Congress that is not particularly interested in intervention. If we look at how they played out the crime bill, it was not about intervention and prevention. If we think it is important, we need to get that out there on the docket. They don't just listen to those of us who are in the administration.

LEVINE: Let me mention just one other thing. In all our zeal for early intervention, I think we also have to be prepared for late intervention. For example, the issue of educational readiness, of course, is a vital issue in preschool. I have my own bias, which is that we should look at educational readiness every year, and perhaps most importantly, look at readiness for adolescents at age eleven and twelve. This has enormous policy implications for kids who are just not ready to get into adolescence.

MCGEE: I don't care what your political affiliation or philosophy is, I think all of us are concerned with crime. Those of us who deal with crime on a daily basis, and I have for half my life, one way or another, as a prosecutor or as a judge, understand that the people that we deal with in the criminal world come from chaotic family backgrounds, and they come from school failure situations. Now chaotic family backgrounds have multiple multiplicities of causation and so do school failures. They are not simple; they are not easy. As a juvenile court judge, I am so tired of reacting to a problem, that is, seeing the fifteen- or sixteen-year-old child after the damage has already been done. They are ungovernable, delinquent runaways. As a policy statement, we have got to put the resources on the front end, that is in early childhood development, early childhood, even preschool—and possibly even prenatal in some cases. We need to put money there. That may sound strange coming from someone who you would think would want to say, "Give me some more detention facilities," and stuff like that. That is not what we

need. We need to slow this process down. It is very clear to those of us who work in this business where we are getting the business from.

Levine: I want to comment on one other reimbursement issue. If we would like the medical profession to participate in all of this meaningfully and collaboratively, a real question is, "To what extent will managed care and new models of health care allow physicians to be actively involved in collaborating with schools and other professionals to deal with these issues?" The picture doesn't look very good right now. People are saying this is not a medical problem. It's kind of funny how much of this morbidity falls between the cracks. I find myself sometimes talking to a group of physicians at a grand round somewhere, and they say this is interesting but it is not really pediatrics. Then I talk to a group of people in education, and they say this is interesting, but it is very medical and doesn't really belong in education. The morbidity falls between the cracks as does the funding because the third party payers say this is an educational problem, and we cannot reimburse you for this; the educational system says that is really medical and not educational. The ways in which clinicians can be actively involved in collaborating with schools is very dependent on whether resources are made available and accessible. We use the same preventive argument that there is something to be said for affronting resources to detect and help a child early rather than paying for his rehabilitation later on, which is going to cost the health care system dearly, so it is a parallel issue.

I would like to open everything up now for discussion.

Questions from the Audience

Question: My name is Beverly Rohman. I am a parent, and I live in Perrysburg, Ohio. I am here not as a professional, but as a concerned parent intimately involved with this subject, having a child with his own challenges and needs. The word "collaboration" leads right into my question. Given the testing that avails us to determine our children's needs, once the multidisciplinary testing is completed, a proper diagnosis is made, and an IEP is established, there are still problems and questions that arise. When a child has several teachers, and parents are left to coordinate and disseminate information, parents are more often at a loss as to how to coordinate and implement these plans. Just as we have established that kids operate best on a one-to-one basis, so do parents. As a parent, I know that is true. My question is, "What can parents do to manage the situation at this point? If the child doesn't have a Mrs. Eldridge, or if parents are inadequately prepared to talk to teachers or the schools, what can they do?" I offer a thought much like the CASA system that is used within the courts, whereby trained parent volunteers who have access to school and medical reports could be assigned to help families on an individual basis—to intervene to help them find correct services and establish individualized programs and put into play by-pass strategies for these children. Is this a possibility?

Answer: **Levine:** Let me say that there are at least some beginning mechanisms for this. Certainly the national organizations can be very helpful in empowering parents—NCLD, LDA, CH.A.D.D., the Orton Dyslexia Society, ASHA, etc. These organiza-

tions play a major role, particularly in terms of setting up local branches or as resources. There are other advocacy programs where a parent can hire an advocate or work with an advocate to help identify services. There are also a fair amount of educational programs, such as the one going on this week, that parents can go to and gain the knowledge needed to empower them to advocate. Some mechanisms do exist that parents can make use of.

I want to take a moment to say I am hoping these panels are not interpreted as "school bashing." Sometimes when people "go after" the schools, they are killing the messenger. Schools can only be an instrument of our society. To expect the schools to be everything and then to blame the schools for everything and develop adversarial relationships is not fair or proper. This problem is a societal problem, not just a school problem.

JACKSON: Thank you for the comment about school bashing. I am an educator. Before I came to the Department of Education, I came from the Milwaukee Public Schools. One of the things I observed a lot in schools is that whatever parents think their problem is, they walk into the school, are very harsh, and want to blame the school versus trying to build partnerships. We have to start by helping teachers understand that parents are partners in their child's education, and helping parents understand that teachers really are not trained to work with parents who come in with a problem with their child. We have to find ways to bridge that. We have tried to do a couple of things at the federal level to help that happen. One is Goals 2000 legislation. Goals 2000 provides money for school districts to develop parent centers. Those parent centers could have advocates to work with parents whose children have special needs. Contact your State Department of Education as they develop their Goals 2000 legislation. Secondly, one of the requirements of Title I is to provide money for work with parents and bringing parents in to shape what happens with schools. I encourage you to contact the person in your school district who works with Title I.

Editorial Comment: At the same time that we are guarding against school bashing, let us also guard against "parent bashing," as it, too, is "killing the messenger."

Question: LEVINE: I am going to quickly answer one of the written questions myself—"How would your ideal assessment work in a school system?"

Answer: LEVINE: It probably wouldn't. But at any rate, I get calls all the time from schools around the country asking which tests should we use on kids. I don't think the real question is what tests we should use. The real question ought to be what should we be looking for. Once we decide what we are looking for, we may not need as many tests because we can educate regular classroom teachers to see it. So, the assessment ought to be based on what the developmental issues are at different ages that we need to be looking for, and then build a local assessment around that which works in that setting.

Question: LEVINE: I want to answer one more question that was addressed to Levine and Judge McGee. He gave it to me, and I gave it to him, and he gave it back to me. That's called collaboration. "I have some of these precious angels you have seen on the street with no books. I teach them Algebra, eighth grade, in St. Tammany Parish. Now that I have them, what can I do as a teacher to keep them from being

their own enemy? They are still in the school and can sleep with their eyes open..." (That's a skill, incidentally, that could have a lot of application in the adult world during their career!) "... but I can lose them. No official LD evaluation or special ed. stuff. What can I do as a teacher? I have my prescription pad."

Answer:

LEVINE: That is a very moving statement, and it is from Yvette D. Williams, Madisonville Junior High School. It is really a question that is very fundamental to what we are talking about today. How can an individual teacher make a real difference?

You know, in medicine we have a wonderful phrase that is part of the Hippocratic oath called "Prima non nocere." It translates, "First of all, do no harm." Priscilla, do you want to help out, or Joyce?

VAIL: The size of the class is important, and knowing the kid's name and welcoming that kid by name into school every day seems to do a great deal. Sounds simple, and it doesn't cost money, but it seems to work.

LEVINE: We also need to make sure that somewhere during that time, perhaps when he is not sleeping and his eyes are open, the child is achieving some kind of benefit or feeling of success in each class session. There was an article in the *New York Times* last week about Judge Clarence Thomas being visited by Charles Barkley. They went and played basketball together last week. Clarence Thomas shot and missed the basket and started walking off the court. Barkley came over to him and said, "No, you can't do that." Thomas said, "What do you mean?" Barkley said, "You can never leave the court after you miss the basket. You've got to get one in before you walk off." We might say the same thing about a kid leaving a classroom. You just can't miss the basket and walk out of the classroom. We've got to make sure you sink one shot before you go into the corridor. Someone once told me, "Any kid can hit a home run if the bat is wide enough." I guess any kid can sink a basket if the hoop is wide enough. We have to create those wide bats and wide hoops.

STEEVES: One of the things that has worked successfully with just such a group has been to say to the kids, "Let's talk about why we are learning Algebra. I hope some problem solving will come out of the discussion." These kids are hearing from all sides that they are problems. Even if they individually are not problems, their whole generation is considered a problem because there is violence and crime and there is not reading. So I have said to them, "I have a problem, and I would like your help in solving it." Telling them it is your problem takes the onus off of them, for at least one period, and it also begins input from them. Once they realize that my problem is that they are not achieving in the area which I am supposed to be teaching, they start giving me some ideas on how I can change my teaching style. I said it yesterday, and I will say it again: every teacher has to be a ham. You have to be a good actor or actress and you have to be dynamic, and you have to involve the children. Tell them you have a problem and ask them to help you. You may come up with strategies which will help you change your whole classroom climate because they will know that you care enough about them to take on their problem as your own.

MCGEE: I don't think you can treat these kids as a group. You are going to have to get to know each one of them pretty well, and you are going to find a leader in this group. Try to pick the leader of the pack, see if you can get into him. You may have

to bring his parents in, if there are any parents involved. Sit down and try to get into that kid's head. Maybe then you can figure out a strategy. You've got to figure out the leader.

DICKMAN: I am assuming that this particular child does not have the opportunity to go into a multidisciplinary evaluation to get the kind of information the teacher needs really to make a connection. Does he have an auditory figure-ground discrimination problem? Do we need to make sure we get eye contact before we ask him a question? What mistakes might a teacher make inadvertently because he doesn't know the manner in which the child is processing communications that are coming in his direction?

A lot of these kids sit in the back of the classroom, avoiding eye contact because of course then they are invisible. One of the things that I often find successful with college students, and teachers could essentially do the same thing, is make eye contract with the student and say, "If you come up in the front of the classroom and maintain eye contact with me, I won't call on you. I won't call on you unless you raise your hand." Often that is enough reward to get the student to move up toward the front of the classroom. Before you know it, the student is part of the class.

One of the things that Dr. Levine, in one of his earlier case histories, referred to was the child who would answer questions only when there were multiple right answers. There are a lot of children like that. We embarrass some kids tremendously who have convergent retrieval problems if, in fact, there is only one correct answer to the question you are posing, and you call on that child. They inevitably fail in that response. If there are a variety of correct answers, you can draw the child into the discussion in a less threatening way. The teacher needs to learn the student's particular style in terms of communication.

LEVINE: To some extent, this fits under the rubric of humiliation protection.

JACKSON: As a teacher, I thought it was important to have kids know that I cared. Kids defined caring by what I knew about them and the people that were important in their lives. I used something called the "Two-Minute Intervention." For two minutes every day for ten days the same child got to talk to me for two minutes about anything they wanted to while other kids were putting their things away. Some kids didn't say diddly for the first five or six days because they didn't think I really cared. When they finally realized they were going to spend two minutes with me in silence, they would begin to tell me things that would give me clues about what was important to them.

There was an excellent quote I heard from a child in a piece called "Voices from the Inside." The child said, "School hurts my spirit." Often school is a place that hurts kids spirits. That is a very painful thing to picture—that we do things that hurt kid's spirits. How do we begin to heal their spirits? What do we as teachers need to do for ourselves as we face tough days in schools because teaching is psychologically tough? How do we let it not hurt our spirit so that we can help heal kids' spirits when kids come to us broken?

Question: Good morning, my name is Margaret Gibson. I am Executive Director of the Learning Skills Center, an agency that addresses learning disabilities of all people and provides or finds appropriate interventions. I also have a child who is learning disabled. She is eight years old. One of my concerns as a parent is that I find

that the materials and texts that are used in her classroom are not age or developmentally appropriate. I have contacted the superintendent of schools here and the teacher, and talked with the teacher about the materials. The teacher tells me that he has nothing to do with the selection of the text. How can I as a parent make an impact in this area? I find the materials confusing to my child; they are ahead of where she is, yet she is required to study these texts.

Answer:

LEVINE: That is part of a broader issue called, "To what extent can a parent be effective in advocating for a child?"

JACKSON: From a district's perspective, the teacher may be correct that he or she doesn't select the textbooks. The first question would then become who does, and how does a parent have input in textbook selection? That varies from district to district. Maybe there is a need for your organization to meet with the person who sets up the selection of textbooks. Secondly, what texts are more appropriate that you might share with the teacher, especially since you are a professional in the field. The teacher may not know. Many teachers are trained to teach out of the textbook and not to teach so that the child learns. They are not trained to ensure learning. What do you know that you could share with the teacher that could help him with your child?

LEVINE: We have to draw this session to a close. Thank you all.

CHAPTER 13

Educational Reform and Professional Development

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St. Germain: It is our intention to allow the experts who are gathered here to tell you a little about what they think, and based on their experience what they would like to suggest in terms of the issues we are going to discuss. The first question that we have is for Dr. Levine: "Today's teachers face student populations which appear to need more complex teaching intervention. How would you educate teachers for the twenty-first century, and what changes would you make in the way we support teachers who are presently in our schools?"

Levine: I have been very fortunate in my career over the last ten years or so in that I have received funding not just to decide how to educate but also to implement educational programs. Some of you are familiar with our project called SCHOOLS ATTUNED, which was supported by the Geraldine R. Dodge Foundation. Through the SCHOOLS ATTUNED program, we work with middle and junior high schools all over North America. It is not a hit-and-run workshop but an ongoing professional development service model.

Additionally, about two years ago, we were funded by the U.S. Department of Education for a professional development project in elementary schools called DEVELOPMENTARY SCHOOLS. In both of these professional development programs, our goal is to help teachers become experts on what is presently known in modern cognitive science and developmental pediatrics about brain development and variations in brain development in children and how they impact on learning. They are based on the premise that in the future, the best diagnosticians there can possibly be is a regular classroom teacher who has been informed and sensitized and knows what she or he is seeing in the classroom.

First, the teachers and the administrators undergo extensive educational training that lasts quite a while. Then they have monthly seminars, modeled after grand rounds at a hospital, where the teachers take turns presenting cases to each other. We have updated videos to keep them abreast of the latest advances in memory, language, attention, fine and gross motor, higher order cognition, self-esteem, social cognition, and so on. In many communities we have the pediatricians actively working with the schools, which has been a really good model. The model also includes demystification for the kids. The teachers learn how to use an observation system with which they can observe children prospectively in the classroom, kids they are concerned about, and get a sense of this child's expressive language fluency, what kinds of strengths and weaknesses the child displays with memory, etc. The project is now in about 50 school systems. Some SCHOOLS ATTUNED schools are affiliated with Outward Bound, which has been an interesting combination with their expeditionary learning.

Our programs have been highly successful in many sights, and we have really been highly unsuccessful in many sights. We have recently published a couple of papers that look at sight variations and the reasons why these programs seem so doable in some places and complex and overly challenging in other areas. Overall, we find that teachers really respond to SCHOOLS ATTUNED and DEVELOPMENTARY SCHOOLS and find the information and its application quite fascinating. These programs have a nonlabeling philosophy where teachers are helped to observe and describe. There are some people here today who are participating in SCHOOLS ATTUNED. It is always interesting to hear what they have to say. SCHOOLS ATTUNED is an on-going affiliation. It is our job to update schools, keep them posted, foster the kind of collaboration we are talking about this morning, and help teachers develop their own management plans to deal

with strengths and weaknesses and affinities in the classroom. We now are starting a high school program, which should be a challenge.

St. Germain: Where can we find these studies on SCHOOLS ATTUNED?

Levine: They haven't been published yet. One has been accepted for publication in *Exceptional Children* and then another article, I believe, will be in the *Journal of Learning Disabilities* next year. We have one study showing the effects on teachers and another showing the effects on children, reimposed. We have control schools that didn't get SCHOOLS ATTUNED training, as well as SCHOOLS ATTUNED schools in the same community that are comparing outcomes. The usual imperfect evaluation research.

St. Germain: Now, a question for Janice Jackson: "Recent polls reveal that most Americans agree that our schools are less effective than we would like them to be. In your opinion what are the important issues to be decided as we try to define school reform and professional development for the next decade?"

Jackson: First, we have to place the focus on teaching and learning; it has to be about whether kids are really learning or not. It is not enough to say we taught them; we need to ask if they learned it. Second, we need to look at reform as comprehensive and systemic. I mean reform that looks at the whole child including his or her psyche and mental health as well as academic accomplishments, where those need to be healed as well as where they need to be celebrated. It is reform that looks outside the educational community and looks for points of collaboration. This is like the Comer Project that comes out of Yale and the National Urban Alliance that is working across the country. They address how to begin to put schools back into the community and stop acting like what happens in schools is only the school's responsibility.

We need to look at professional development and life-long learning. We need to look at it in the context of what happens daily in teachers' lives. Working in the classroom is not liking working 9 to 5. When a teacher is in a classroom, he is on duty from the minute the first child walks into the building until the last child leaves, and then he has to do his evaluation work. Somehow or another, we pretend that children learn at the same levels, and at the end of the school day or on the weekend teachers receive all sorts of down time. That is just not real. We need to look at new ways of special development that encourages life-long learning and mandates that teachers continue to stay in the learning process themselves.

We need to look at resource allocations and place our resources where our priorities are. Public education is a state, not a federal obligation, because the federal government only funds about six to seven percent of school funding. We need to look at how we use our resources, and place them where we think it is most important.

We need to look at the common good. One of the major roles of the federal government is to insure the common good. Our habit in this country, despite our boast about "E Pluribus Unum," is really to place the disenfranchised on the fringe so we can continue to maintain those who are poor and don't fit whatever we consider the dominant culture to be, and people for whom English is not the primary language, on the outside. We need some new habits that are based on inclusion, not exclusion. Those are not hard habits to learn; we just need to make them our habit.

We need to hold teachers and communities accountable as well. Should we ever entrust our children to people we don't know and then say, "Teach them, and if you don't teach them, that is OK"? All of us need to continue the issue about accountability and what we are doing to insure that our own children are learning, not just that schools are working. That calls for partnerships with both parents and community people, business people, and people in higher education to insure that there is a whole village that is raising the child. If we say that everybody is very happy to say that it takes a whole village to raise a child yet the village is sick, the child that is raised will be sick. This says to us that the education of children requires a healthy community. That it is not only the responsibility of educators.

And how can I guarantee funding? I can't. Let me explain why. I can't guarantee funding because funding comes from Congress, which means that all of us have to participate in the political process. What I can guarantee is that the measures my office puts forth will ask for the kind of money we think is required to educate children the way that we think is important. The guarantee for funding comes from the political process. That means that all of us need to be involved. We had better not sleep, or our children will not be served.

FEMALE IN AUDIENCE: The voucher system has been discussed as a way to make the public schools more responsive to the needs of the true consumer: the student. As far as I know, in Wisconsin the voucher system has been put into effect in Milwaukee, granting parents money and allowing them the freedom, without districting, to put their children in any school that that money will allow them to enter. Do any of you have an update as to how successful that is, and more particularly, what that does with the LD student?

JACKSON: Milwaukee is my home district. Two studies that have been done have shown that a number of schools that said they were going to accept vouchers were schools that closed mid-way through the first year. Kids were left without a school to attend, and they had to scramble around to find a school for attendance. John Wittie from University of Wisconsin at Madison has done studies for two years showing that in some cases the kids are equal, and in some cases they are doing worse than the kids who are attending the public school system. So it is a mixed bag. If we don't get at the root issues, vouchers aren't going to change anything.

ST. GERMAIN: Next question: "Most teachers are uncomfortable with the idea that they should be responsible for diagnosing learning variations. How can we support teachers as they work to meet the needs of all the children they teach?"

STONER: We have to encourage teachers to think diagnostically. Instead of an answer being right or wrong, why is it right, or why is it wrong? Teachers need to think about other ways to teach that information to students. Hands-on Algebra is a very different way of helping students graphically see what is happening when using abstract letters to represent values they don't know. This manipulative, hands-on approach makes sense to kids who are more visual in their approach. It reminds me of two instances. One, a student drew everything with a black crayon, and everyone had psychiatrists trying to figure out what was wrong with the kid. Finally, a teacher said to him, "Why are you using your black crayon?" He said, "All my others are broken!" The other is a lesson from math. A student could add and subtract in the first and second grade but by third grade couldn't do it any-

more, and the teachers didn't know if there had been a brain injury, an auto accident, or what had happened. They sent the child to the school psychologist for testing. The psychologist talked to him for a while and said, " OK, I need you to do a few math problems for me." The student asked, "Where is your piano?" The psychologist said, "What do you mean, 'where is my piano?' I don't have a piano." The student said, "Well, then I can't do math." The psychologist knew there had to be an answer for his, dug around a little bit more and discovered that in the first and second grades this student was in a classroom where there was a piano. The piano was to his right, so he knew where to begin with the addition and subtraction problems. This room didn't have a piano in it, and in the third grade the piano was on the left, so the kid didn't do any math because he had lost his means of finding his "start" location! Kids make "strange" generalizations. Because our classrooms have become so large and impersonal, we don't ask kids, "Why?" We've got to think about what we are doing and why.

If your children are in the back of the classroom, that is where you should be. That is where you need to go and do your teaching. You can't fix every problem for every kid; you can't think diagnostically for every kid. Pick the kid who gives you the most difficult time this year and work with that kid and figure out what he or she needs in order to be able to solve that particular issue. Build a personal relationship with them. When you get to know them as a person, you will know why things are hard for them. Keep that relationship going. Build that personal contact.

St. Germain: Comments from the panel on diagnostic relationships?

Levine: The word diagnosis is a pretty strong word. Sometimes just telling teachers to become good observers and see the implications of the observations they are making works better. "Diagnosis" may sound extremely clinical for a teacher. Choice of words can be important.

Stoner: We are all good observers of behavior. If you have a child coming in with toys to play with in the classroom, maybe you need to look at the task the child is being asked to do when the toys come out of the desk. Observe and gain, in a collaborative effort with other people on your staff, the kinds of things that might be happening to cause that child to react in that way.

Levine: It is equally important not just to be able to evaluate a child, but also to be able to evaluate the expectations you are imposing on that child. This is called "task analysis"—to be able to understand what it takes to do what it is you are asking that child to do.

St. Germain: It has been my experience that if this is done in an informal way in the classroom in a way that meets the need of the kid, it doesn't have to be formalized in any diagnosis. So when I work with teachers and they say, "But I'm not a pediatrician, and I'm not Dr. Levine. I read his book, but I am here to teach this youngster." The message I hear at this conference is, "Yes, but you are also here to observe that youngster. You are also here to informally understand how that youngster is going to find some success."

Jackson: Some of that means doing more work with parents. Hear from parents what they observe about their children and how they interpret what they are observing about their children.

St. Germain: The next question has to do with inclusion: "What does inclusion mean to students, parents, and teachers in your judgment? Is it a worthwhile educational goal? What are some of the road blocks that systems face as they try to implement inclusion programs?"

Brown: First, I would like to address the topic of what inclusion means for students, parents, and teachers. I want to talk about parents first. Not long ago in our school district, we had quite a brou-ha-ha concerning inclusion. A parent at a public school board meeting said, "If you mix good grapes with bad grapes you are going to have poor wine." He did not want inclusion for his regular education student. This means that we as educators must educate parents to help them understand the concept to a greater degree so their mind-set is not negative. The parents of an LD child look toward inclusion as a way of giving their child more interaction with his peer group that is not learning disabled with great anticipation and positive attitudes. So different groups of parents look at inclusion in different ways.

To our teachers, inclusion means a lot of staff development and understanding and a positive attitude on the part of the teacher as well as a willingness to do this. It should be presented in such a way that it is not crammed down one's throat but collaboratively designed.

One quick story about how *not* to do inclusion. I have a daughter who teaches social studies and geography out in Colorado. Late one night, my telephone rang, and she said, "Mother, are you all doing something down there called inclusion?" I said, yes, we are. "Well, Mother, that is the dumbest thing I've ever heard. I went to school this morning to find that I now have two BD (Behavior Disordered) students and two LD students. I have a master's degree in geography and am certified to teach social studies. I am not trained in special education. How am I supposed to know what to do? They sent in a paraprofessional, a mom that they employed. She doesn't know what to do with the BD kids either. I had a big fight in my classroom today—blood going everywhere." My only advice was don't forget the gloves. Just put on the plastic gloves! When a teacher goes into inclusion with no preparation, no advance warning, and no kind of collaborative effort, what can we expect her attitude to be? My daughter grew up in a family with a younger brother who is learning disabled. She knows the things to look for in learning disabilities. She knows how to adjust instruction. But a teacher has to be given an opportunity to plan for things like that.

The other part of this question is, "Do you think inclusion is a worthwhile educational goal?" I certainly do, both personally and professionally. But inclusion is not for everybody. There has never been any one program that we as educators can crystallize out and say this is good for everybody in the same way, at the same time, under all conditions. Inclusion is a great opportunity for some kids but not for all kids.

One of the things we need to do is lower class size. If we get down to a reasonable number of kids in a classroom, it is certainly going to be easier to handle. It is a worthwhile effort. When we are adults, we all stand in line at the check-out counter at the grocery store, and it doesn't matter what our label has been in the past. We are all human beings. It is our responsibility in the schools to give opportunities to as many students in a supportive way as we can.

Levine: Some of the best French wines consist of grapes which you would never want to have wine made from in isolation. But if, for example, you mix the syrahh grape with the pinot noir grape, you get the great wines of burgundy. It you used

either one of them alone, it would produce a really mediocre, tasteless, dilute wine.

Brown: If I had that bit of knowledge, I certainly would have used it at that board meeting! I thank you for that information!

St. Germain: We live in very exciting times. We are renaming everything. We are renaming the act of teaching. We are renaming children and how we group them. We are renaming intelligence, what it is, how we know it, and how we will know to nurture it. While these are very exciting times, they are also times with a great deal of ambiguity and risk. Certainly ideas that are as acceptable as inclusion will be generally accepted in the schools but will have difficulty being implemented.

Dr. Levine, I have a question on attention deficit and medication: "Over three million students in America take drugs to improve their attention and their behavior in school. Is this a recent epidemic, and why is this attention variation seemingly more present in today's schools?"

Levine: Nonspecifically, when we talk to teachers who have been around for a long time, they will often say that when they first started teaching, they had three kids in their class each year who were having problems, and now they seem to have eight or nine. So the prevalence of trouble seems to have increased, and if we want to call all that trouble ADD, then I guess the prevalence of ADD has increased. But we need to look at several speakers, including myself, who said this week that attentional dysfunction is very nonspecific. In some ways it is child development's inflammatory response. All it tells us is that something is not working right, and we need to look a lot further.

It is deplorable how many kids are being put on medication without careful evaluation. The problem with medication is that it tends to work, which can be really quite unfortunate. Specifically, for example, we know that normal children can be helped by Ritalin, too, so the fact that a child improves on Ritalin doesn't show that he had an attention deficit. You, too, might improve on Ritalin, and you may or may not also have an attention deficit. There are a lot of things driving the surge in the use of medication, one of which is that it is a quick-and-dirty kind of fix. Another is that spending a lot of time with patients nowadays is not terribly reimbursable. Writing a lot of prescriptions is very reimbursable in the health care system, so that, too, is driving psychopharmacology into becoming a huge industry now because it is the most reimbursable.

We are definitely seeing more kids with more difficulty functioning in the classroom. The symptoms of attention deficit on a traditional questionnaire for attention deficits are so nonspecific that you are going to pull in all kinds of kids. As the psychiatrist Michael Rudder once said, "Can you possibly even conceptualize or give me an example of a 'bad' boy who doesn't have ADD?" Is that even something you could conceive of? A bad boy who is very thoughtful and not at all distractible and does very good self-monitoring? I mean that kid would be pure evil! So, I think it is being over-diagnosed. There are some very important concepts we don't want to throw away that we are learning by looking at attention as an issue, but it is obviously being grossly over-diagnosed, and we are missing a lot by just calling everyone ADD without looking more closely at the profile and the circumstances of those individuals. We know how to do that; we just have to operationalize it.

Jackson: We have to be very cautious with making this diagnosis because African-Americans historically have been given the most labels and warehoused

in special education. Are all these children as sick as we say they are? We need to change the deficit model, be more pro-active, and reach all the children, as we have heard here today. We need to find out where they are and how to reach them.

FEMALE IN AUDIENCE: Ever since Dr. Levine gave his talk yesterday, I have been thinking about a common thread that seems to run throughout these sessions, which is that we need to bring the classroom into alignment with what we now know from those who are not in the classroom. Right now they are out of sync with each other. As professionals, we need to learn from each other and have the dialogue and team collaboration that we have been talking about for the last few days.

ST. GERMAIN: The next question is for Mr. Bankston: "In the early 1980's, Howard Gardner challenged decades of literature on the nature of human intelligence. The debate over intelligence, what it is, how we measure it, and more importantly, what we do to foster it, rages on today. We would like to hear your views on standardized achievement measures as they are used in schools, ability grouping and tracking, and retention."

BANKSTON: As a rookie teacher over thirty years ago, I remember three things that were discussed at my first faculty meeting. They were the achievement tests and what value they were, ability grouping, and whether we should fail kids or not. Now, over thirty years later, we are still discussing the same issues. It is interesting to me to look at how my views have changed over the years. As a twenty-one-year-old rookie, I felt that we should teach kids, give them achievement tests, put them into ability groupings, and retain those who failed to achieve. After a lot of experience and reading research, my opinion has changed drastically, but it didn't change immediately. I was a principal for eighteen years. For twelve of those years, I used ability grouping, and to a large extent we relied on achievement tests to tell us a great deal about what we were doing and how the kids were doing. We judged students not only to group but also to retain. However, I don't feel that way today. Today I know that there are positive aspects of achievement testing in evaluating ourselves and the entire group, but I no longer believe it is fair to evaluate an individual by achievement tests. That is dangerous. As far as ability grouping goes, I was present with Dr. Brown the night the parent talked against inclusion on the grounds that one "bad" kid spoiled the barrel. I wasn't as up on wine as Dr. Levine is, or we would have used that analogy! This parent's discriminatory attitude made us angry. I can't believe that I led a faculty for twelve years that ability grouped. The last six years as a principal, I certainly did in a different way. Kids of different abilities in the same room with a good teacher can do a fantastic job.

As far as retention, we should retain young people mostly only in the lower grades because that is sometimes necessary. We don't need to call it failure. For example, in St. Tammany Parish, we have a transitional first grade. Transitional first grade provides an excellent opportunity for a child to solidify basic skills with another year of transition between first and second grade. They don't fail; they spend an additional year mastering important skills.

As far as intelligence is concerned, I won't touch on that because I don't know how to judge intelligence. I don't know how we can judge who is the most intelligent person in this room. I may do pretty well, for example, on some academic questions, but I am not sure how well I would do on fixing an automobile. Both tasks require intelligence. I wouldn't want to judge which is a better kind of intelligence.

St. Germain: We are going to shift to the courtroom now. While it is simplistic to say that poor schools create crowded courthouses, many researchers document a connection between violence and school failure. Judge Greene, do you know of any court mandated interventions that have improved the chances for first offenders?

Greene: First, we need to show the connection between learning disability and crime. There are several studies that show a high correlation between the two, and some that show a medium one. We can find conflicting statistics. A study that is widely accepted shows that 50% of juvenile delinquents, children who have been found by the court to be guilty of violating a crime, have a learning disability. That is a very, very high correlation. One or two studies have said that at least 82% of the people with learning difficulties have secondary emotional problems. So yes, we do see these kids in court. Unfortunately, by the time the juveniles get to the court and become adjudicated a delinquent, we are kind of late in the system with intervention. All judges recognize this, and it is necessary for you to know that we recognize this. We realize that we must do something about it. It is just like fighting the drug problem. We are not going to cure the drug problem of the United States by putting people in jail. That doesn't mean that we can stop. We have to deal with the problems of violent offenders. We do have some intervention programs, but each area or state is different. There is a lot of local autonomy in judicial districts regarding intervention programs. I know of youth service bureaus that act as probation officers in implementing programs. We do have a very important program which is just now being inserted, or shoved down, whichever phrase you want to use, into our system, without funding, and that is called FINS—Families In Need of Services. If you are not familiar with it as educators, you need to become familiar with it. However, don't just give up on your obligations as educators to work with a child who has a problem by putting these children into a FINS program. Basically, for children who are acting up in school or running afoul of the law for the first time, if all else fails, you can refer the children to a good FINS program. That program will treat the family and the child and will diagnose the child's problems. If a child has a learning problem, that should come to light. There is a treatment process in FINS. FINS is a very involved program that is brand new. Some courts have said to the state, "Thank you, we understand the program. Call us again when you have the funding." Other districts have tried to implement this program. It can be a very, very successful program, and it can help in the area of learning differences with those children when they run afoul of the law.

St. Germain: Dr. Wimpelberg: "As we reform our schools, how can we guarantee that teachers receive adequate training for the schools of the future? How do you believe this training will be specialized, and how will teacher certification change in the next few years?"

Wimpelberg: Probably the question on all of our minds is whether Dr. Levine brought his prescription pad!

Teacher education, in preparation for teaching, is inexplicably linked with what goes on in classrooms and what teachers are doing who are already out there. My comments are going to sound rather pessimistic, but I view our problems to be in the college and university. I cannot give you a rosy picture about what we are going to be able to do and what it will take to implement the kind of movement we need to make. There are a number of continuums to be considered.

First, programs that attend to learning differences have to be based on a scientific and research model, such as a program as sophisticated as SCHOOLS ATTUNED. As most of you probably know, teaching historically is based on a kind of common sense and nurturing model. To move from that end of a continuum toward what we call the diagnostic, scientific research model is a huge undertaking because teaching comes out of a tradition. We might say, "Well, shouldn't people in the colleges of education be moving our folks from one side of the continuum to the other?" Yes, we should. That is our obligation. But let me observe for you that we hire college teachers who have come from classroom teaching experience out of the tradition. We are attempting to respond to the impulse to put future teachers in classrooms as early as possible, in the freshman or sophomore year. But unless the classroom teachers who are modeling for them are using the new scientific diagnostician models, guess what is going to get reinforced? So the struggle to move folks on this continuum is one of our major challenges.

Second, if it were true that all educators said that what you are studying here today is what must happen, the regulatory process that governs education then should should be influenced by this movement. As you know, however, education is regulated not on a professional model, but on a democratic model. For example, we are now being asked to respond to a House concurrent resolution in Louisiana that has asked us to explore ways that we could deliver a new course to teachers at the student-teaching stage that would help them deal with severe discipline problems. That plays itself out with a conceptualization of what the discipline problems are that have to do with teaching teachers how to help control those kids. There is a mind-set. That is not the professional model; that is sort of a democratic regulatory model that it comes from. If we are to come back and talk in terms of dealing with learning disabilities as part of the solution, we would be viewed with some skepticism initially as a college of education. That isn't what we are being asked to do. We are supposed to help teachers deal with severe discipline problems. This professional / democratic continuum is another on which we need to move along, and that is another of our challenges.

Much of the new development is neurological and medical, but the basis for teaching is not that. Teaching in this country is old enough to have its own traditions. It is based on child care, nurturance, and a pedagogical model. A quick example: when Alice Thomas first approached us at UNO and asked if we would be interested in underwriting with credit some of the coursework in the SCHOOLS ATTUNED program, first I went to our chair of the Department of Special Education and our chair of Curriculum and Instruction and described it for them very quickly. Their first response was, "Wait, this is medical. How do we know that this program will understand what educators need? How can we be sure that these folks who created this program have ever been in classrooms?" I am happy to say that when we finally got together, and we met with medical people involved in the local SCHOOLS ATTUNED program, we understood and said yes. The college of education at UNO doesn't have the capability of providing this sort of program, but we like to offer graduate course credit to educators who complete the program under the direction of the local SCHOOLS ATTUNED staff. We formed a collaboration. But there is yet another continuum there. We tend to still function in some other traditional ways about what we think teaching is and who should know about teaching, and the medical model is not one educators buy into easily.

The same thing applies to funding. Funding tends to be traditionally rooted for education with what people think education or schooling should be like. Our

opportunities for funding, I suspect, to do things like this better are going to come from mental health or from medically based sources rather than from traditional schooling sources, so that is our challenge. We won't easily change rooted attitudes.

Finally, everybody thinks they know what education should do. First of all, education is seen as a panacea. I am not saying education isn't an important aspect of how our society develops, but education is a panacea in most people's minds and everybody thinks they know how this panacea should be tweaked or reformed. The corporate community, and to some degree legislative policy makers, have been telling us now for more than ten years that the trouble in education is with content. Our kids don't know math and science. It's content. They are not able to manipulate or understand geography or to deal with the cognitive higher order problems. Content is at the other end of the continuum from the learner. Learning development and approaches to learning are just as important as content. We can't separate the two. So as colleges of education, all too often we can be pulled into spending time and energy accentuating the content of the teaching of math and science which is going to pull us away from paying attention to the kinds of issues that are being raised here. So there are several sets of continuums where we have challenges to overcome if we are to move ourselves toward a different side.

Jackson: Wheelock College in Boston, Cambridge College in Cambridge, Massachusetts, Bank Street College in New York, Michigan State in East Lansing, and Alverno College in Milwaukee are looking at how to train teachers based on a constructive model or experiential model of education. If you look at the fact that the average age of teachers is about 45 or 46, we aren't talking just about new teachers. We are talking about older teachers who have a long time to go in the profession of education. We need to look at continued professional development for these teachers.

St. Germain: Shirley Cramer, we know a lot about how kids with special needs need to be taught, unfortunately what we know is not getting to teachers. How can we mandate the dissemination of this information and how can we get it to the people who are sitting here?

Cramer: I liked hearing what Dr. Wimpelberg said about the issue of science and research versus education because this has essentially been a knuckles-rubbed-against-each-other situation. We are hoping for the future that there will be a much more collaborative venture between what is known in science about learning disabilities and what is taught in school. The question relates to the fact that in 1987, in a report to Congress, it was decided that money should be spent to research the definitions of learning disabilities, and then work towards intervention. Over $100 million dollars has now been spent on research at the National Institute of Health and Human Development. Some of the progress that has been made has been extremely good. The bad side is that the results of that research are not currently being applauded in the classroom.

Necessary collaborations were not put into place to make that happen. When you have an issue as complex as learning disabilities where the problems or the reasons that a child has a deficit are neurological, and the treatments or therapies are essentially educational, then we are really cutting across disciplines. Researchers at the National Institute of Health, for example, have shown that chil-

dren with learning disabilities need to be taught specifically to read through decoding of sounds—the basic deficit is in phonology. Specifically, I talk about reading because that is what we know most about, and we know that 80% of the children classified as LD in the USA have their primary deficit in the area of language and reading. Some states have taken on "whole language" as the only method of teaching reading, which means that they are missing 10-15% of the children in their classrooms who we know scientifically will benefit from specific decoding instruction. We are saying very strongly that teachers should be told, both in preservice and in-service professional development, that 10-15% of their students are not going to learn to read by one method of teaching reading alone. With regard to the public policy in professional development, then, we know a lot, but we are not passing it on to state departments of education and teachers. We are not advocating that whole language shouldn't be a part of professional development; certainly the teaching of reading is a very rich and textured variant. But teachers need to know that there is a group of kids who are going to be missed this way, and therefore the teachers need to be taught specifically and structurally how to teach these kids to read.

The analogy we use in Washington when talking to law-makers is that if we had made these discoveries in the field of AIDS or cancer, certainly they would be implemented in the medical treatment. Yet we know this good information definitely, but it is not being implemented. Is that educational malpractice? We need to insure that state departments of education know this information and that it gets to the teachers who want the information.

ST. GERMAIN: Deborah Smith, "How would you foster grass roots school reform?"

SMITH: Dr. Wimpelberg hit upon how to foster grass roots reform. In the past, when we talked about training teachers, we were still using the same traditional models. In New Orleans we are now embracing the Comer Model developed by James Comer at Yale in six public urban schools. Faculty from the College of Education of Southern University see the model as a means for restructuring the way we prepare our teachers. The Comer Model has a parent program, a mental health team, and a school governing body. Using this model, we interface teacher training in almost every area, especially with the school planning management team and the mental health team. We begin sending our education students out into the field as early as the sophomore year. Before, they were going out to the schools and helping in the classrooms only with simple mundane tasks such as checking the attendance roll and putting up bulletin boards. As they progressed through the college of education, their tasks became more complex. This training model is almost analogous to that of the medical field where medical students begin with the internship and then move to a residency. We perceive a resident as a student-teacher. Now we see our teachers also being trained early on in working with the medical profession and the mental health component because they are allowed to work side by side with psychiatrists from Tulane University School of Medicine. We have two part-time psychiatrists, one full-time child psychologist, and eighteen school social work interns, so our students are taught now in a less traditional way. How does that impact the college of education? Periodically, we bring the students in to have them discuss what is going on out there in the school setting with their professors. It puts the pressure on the college professors to get out of the

college walls and get back into school classrooms and actually see what is happening. We have found gaps in our curriculum, and we are correcting them. We have to be willing to change. Yes, we have research that says a whole lot of things, but what about the research based on practical experience? We need to talk more about that. The principle of the Comer Model says to collaboratively act on consensus. It is heartwarming to see teachers, parents, and health care professionals sit down at the table and talk about the comprehensive schooling and care of a child and to have psychiatrists or psychologists go into the classroom and make recommendations as to how the teacher can help and address the needs of a child who may have some kind of learning difficulty in the classroom. If you can find a student-teacher who has worked along side a mental health professional, then you have somebody who is trained to go out there and look at a diagnosis a little differently, to look at a child who is somewhat different but who can be reached and taught.

SONIAT: In professional development specifically, we are fortunate in Louisiana that our state departments moved into a new shift about five years ago when we were working particularly with the issue of dealing with dyslexic children in our state, and I think we have all come to see that as a real turning point for what is going on in our classrooms in Louisiana. There is a lot of activity going on in our state, but there needs to be more. We need to continually look at the research. We have a long way to go. We have no money for training, but we are moving in that direction now.

Our State Board of Elementary Education has a lot of foresight. Many years ago, we were able to lock up some money in this state called 8G money. Through competitive grant programs, we fund a lot of projects that address multisensory needs of children and individual learning styles. Several years ago, the education department had an opportunity to recommend a number of model programs that address specific learning styles of children. Many of our districts have funded training under 4MAT and other types of individual learning styles training through those particular funds. One of the other things that is happening through our 8G program is funding for School to Work training. In School to Work, we work hand-in-hand with children to help them with career choices, teach them job skills, and work with them as they transition into the world of work. This year we took a portion of the money and set it aside strictly for professional development training for existing teachers. Many school districts are working in coordination with colleges and universities. In fact, some funds are set aside for colleges and universities to form a consortium with parish school systems to provide training. Also, the Goals 2000 initiative is a wonderful opportunity for Louisiana funding wise. It is also an opportunity to change the way we do business in Louisiana so that we no longer use monies categorically. That initiative and the reauthorization of several of the major federal funding statutes allows us to start doing business in a more creative and smarter way. Our state has, in our elementary education, begun a primary school initiative which looks at teaching children in a nongraded type of primary unit. We also have the instruction enhancement program under which many districts have accessed funding for particular multisensory reading programs. Actually, the dyslexia funding or the funding that you might get for the program for dyslexic children comes from that program. There is wonderful activity going on with math and science teachers in this state—hands-on, multisensory,

individualized instruction in math and science. We are hoping to move that approach further into other curriculum areas as well. So we are working hard to provide professional development for the teachers of our state.

ST. GERMAIN: This marks the end of this session. Thank you all.

CHAPTER 14

Parents' Role/School's Role

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St. Germain: The topic of this session is the parents' role and the school's role. The first issue is: "The role of the parent is to be an informed consumer and an articulate advocate. The role of the school is to deliver remediation. This seems to be the generally adapted way of dividing out the role. Do we need to rethink this division, and can it really be so neatly defined?"

Brown: First, taking the lead from this conference which is referred to as a summit, every parent conference that we have should be a summit conference. It should be one designed not to lay blame or create guilt, but to help the child and get down to education. The focus should be, "What is it going to take to help this child?"

Secondly, we need to create an educational adventure for children through their parents and all of the deliverers of service including teachers and all related personnel. In answer to your question, certainly the parent needs to be an articulate advocate, but we've got to get real. We deal with parents who don't have a clue about what some of the available services are for their children. As long as their child has not created a problem at school that day, and he is clicking along and coming home with "C's" or maybe a few "D's," Mom and Dad say, "That's okay." That child has the potential to do more, and so parent education has to be part of what we are doing.

Finally, if we can have a summit leading to an educational adventure in an interdisciplinary way, involving all of the providers and the parents, then it isn't hard for us to come up with an interagency agreement that will allow a private group to come into our public school system and work hand-in-hand with the system to help these kids. This is what we have been able to accomplish between the St. Tammany school system and the Louisiana Center for Development and Learning, and we are looking forward to this relationship growing. By the way, the group from St. Tammany Public Schools has identified at least five broom closets which they are willing to put some of these providers in, if they want to come and work with us!

Mason: I am not a member of any of the articulate agencies so well represented here. I am neither a teacher, nor a physician, nor a psychologist. I am an independent educational consultant. In my role as a professional, I intervene with and for parents on behalf of kids. To expect any parent to interact with any of the professionals which are brought to bear, in my line of work, as an articulate advocate for their child is wishful at best, as well as foolish and ignorant. The parent is that person within an array of professionals who has the least specific knowledge. He or she or they know only that all of the systems that they have relied on for their child's six or eight or ten or fourteen years seem to have failed simultaneously. They are as confused as, perhaps more confused than, the child. To expect them to be articulate and/or an advocate seems unreasonable. That is why this group has been formed—is that not correct? May its drive increase.

Thorne: I am a parent, as well as being a psychologist. Before becoming a psychologist at the Louisiana Center for Development and Learning, I worked in the public school system for six years and in private practice for two years. I am the parent of two children who are now adults with attention and learning difficulties. While I agree that parents may not always be able to be articulate advocates, I do think that they have to strive to be that, as well as informed consumers. My hus-

band and I had several evaluations of our children done both within the public school system and in the private sector, but a lot of questions were still unanswered. I went to graduate school, got my Ph.D. in psychology, and finally diagnosed them myself. We can't all do that, but every parent's responsibility is to become an informed consumer in the best way they can.

Often the first place a parent goes to for help is to the teacher and to the school. Another frequent source used by parents is their child's pediatrician. If the answers are not there, they need to talk to other parents. There are also organizations and agencies whose primary responsibility is to serve as a referral source. If parents have a child with a debilitating physical illness, the parents would not stop until they found satisfactory treatment answers. Parents need to do the same thing with school problems—keep looking until satisfactory answers are found. If you do not get information from professionals that is consistent with what you really know about your child, then I would say to you, "Keep on searching." Parents are wonderful sources of information. Professionals need to listen to them.

Regarding the teacher and remediation, I do not feel that it is the total responsibility of the school system to provide for the education of children. It is also the parents' responsibility and the community's responsibility. It must be a collaborative effort.

We have heard a lot today about teacher education and teacher training. As a school psychologist for six years, unlike the classroom teacher, I had the opportunity to attend a number of continuing education workshops and professional conferences. However, I found when I went back to the real world of work that I did not have time to implement the things that I had learned. If the situation was that way for me, I know it is probably ten times worse for the classroom teacher. It isn't just a matter of training teachers. There must be some time provided for follow-up, and some linkage of this training back to the classroom.

DiMarco: My concern as a parent, and I would consider myself an articulate advocate, is that sometimes that is not even enough. As a working parent, my concern is that there is not enough time and information out there for all of us. We—our government and our society—need to take a look at the role that we have played for all of these years. Most American mothers no longer stay at home. It is extremely hard to be an informed consumer and an advocate for your child when you are working from 9:00 a.m. to 5:00 p.m. and the only time you can see the teacher (or the pediatrician, psychologist, or attorney) about your child is on your lunch break or after 5:00 p.m. This represents a huge change in our society. I am not sure that we have the answers, but I do think that we need to continue talking to each other about what we can do, so all of us don't feel that pressure build-up.

I have done as much as possible for my children with regard to their learning disabilities, and I feel that the schools are trying to do as much as they are able, but it is not enough. We need a lot more help from outside people coming in. We need to pull our resources together.

Dickman: Everything that has been said in this discussion thus far is based upon an acceptance of a certain role that parents have assumed as advocates and consumers. If we are going to rethink the role of the parent in those terms and question the paradigm that we have been discussing here, it is clear that generally parents' abilities are more closely aligned to what the school district's responsibilities are than they are with the child's needs. What I mean by that is that the par-

ent and the school district should both be providers and advocates, and the child should be looked upon as the consumer. The role that school districts often put the parent into, having to act as an advocate, is one that polarizes the IEP. It polarizes these conferences with school district personnel unnecessarily because generally everybody is looking to do the right thing for the child involved. If we can get this kind of honesty and forthrightness that we are entitled to theoretically by law, by school districts and parents being more open, we can change this paradigm and bring the parents into a role as a service provider as well as an advocate and accept the fact that the school district is also an advocate for the child. Then we don't have "two sides to the story" all of the time.

St. Germain: That brings us to our next question. The question is: "How can we—school districts and support agencies—help parents feel comfortable in taking an active role in the education of their children?"

Howard: First of all, in order to make parents feel comfortable at school, we have to make school a friendly place. A lot of our parents feel negative 'vibes' when they come to a school. These vibes may be sent by everybody in that school from the custodian to the cafeteria person. If the parents meet school personnel and get a very negative response from that person or persons, the tone is set for what is going to happen for the rest of the meetings in that particular school.

As a principal, I have to set the kind of atmosphere that makes people feel comfortable when they come into the school. If I set forth a positive attitude and talk to parents with respect and dignity, I get the same things back. Usually what happens when a parent comes in with a concern about something is that everybody gets defensive immediately. If I listen to what that person has to say and explain to them what took place, usually I can mediate that situation without a lot of difficulty.

Our teachers are constantly bombarded with numerous types of programs and activities that they need to do, so they are 'stressed out', too. When parents and teachers have conflicts, both are on the defensive—the parent feels the teacher is picking on their child and the teacher feels that the parent is not instructing their children to do what needs to be done. The adults have to strike a happy medium and realize that the young person is the most important person that we are concerned with at that particular time. Let's take the adults out of the arena and deal with the young people.

We need to pull back some of these things. There are so many different programs and forms to fill out that it is driving the teachers crazy. It drives me crazy as an administrator. If we try to resolve some of these issues and if some of the experts on campus could do some of this mediation, it would help us tremendously.

St. Germain: I am reminded of a quote by Alfred North Whitehead, "T'is rock of time upon which the dreams of learning are dashed." It is always, as Betty and Dr. Brown were saying, that time is the issue. When do we have time for this youngster? When do we have time to meet this parent? When do we have time to add this new program? As we analyze this active interaction between the child and the school, let's look at time as an issue. How do parents mediate when they fear they cannot? Alice, isn't that something you help parents with? How do we all find time?

THOMAS: Quite often parents are intimidated. They don't know what to do. They can't read or talk the jargon that all of us are so familiar with. It is scary. Their child is suffering and in pain, and all that they know is that they don't want their child to go down the drain. The schools, I think, genuinely want to help; they love these children and want to work with them. Teachers, however, have thirty-five kids stuffed in a classroom, and schedules to keep and curriculums to follow, and if they don't finish, they're in trouble. So we get in this grind. We are all stuck in this fast food world. We have phones in the car. We have everything going on the fast track because we are in a hurry. We try to cram it all in.

We can't do it that way. We just can't do it that way. Not parents and not schools. Our children deserve our time, and if it takes more time, we need to make more time. It makes a lot more sense to take the time to sit down and talk about a problem than to let it fester into a huge boil that will eventually erupt. We can avoid all of that if we stay focused on the child and take time to advocate together. We at the Louisiana Center for Development and Learning, like many other non-profit organizations represented here, make ourselves available to parents who don't know what to do and don't understand how to go about finding correct management for their child. We provide information and parent education so parents can understand and have a clearer, calmer feeling of what to do and how to work with the system rather than against the system. The system, after all, is there for the children in the first place.

ST. GERMAIN: One of the key issues is recognizing when to be active. I wonder if anyone on the panel could identify some tell-tale signs in the youngster that there is a problem at school prior to having that youngster fail in school?

THOMAS: Words like "boring"—"School is boring." "I hate school." "I don't want to go to school." "I'm just stupid." Frequent comments like these are signs that something isn't right. Other signs may be there also. I'll use my son as an example. He was having lots of headaches when he was in kindergarten. The kindergarten principal and his teacher told me everything was "just fine." But I didn't think things were just fine. I didn't think kindergartners should get headaches from school. He didn't have these frequent headaches during weekends, holidays, or the summer. My son was very stressed as a kindergartner. We just need to see what we see and hear what we hear. It is all right there in front of us.

MASON: From the kids I see in my office, the main sign is happiness or the lack thereof. If the child is unhappy, the parent will usually seek help, regardless of whether the child is getting all "A's" or all "F's." If their child is happy, the parents don't really care that much if their child is getting "B's" or "C's," because their child is happy, has friends, and is working to potential. All most parents require from their children is that they work to their potential, and not that they get all "A's" or that they become president or something like that. What stimulates parents to come to me as an advocate, and how I feel as a parent, of course, is that if my children are happy, I am kind of insensitive to whatever else might be going on in their lives. On the other hand, if the child shows any flicker of unhappiness, I am going to respond immediately.

ST. GERMAIN: When children have been expelled from school programs, special intervention is obviously warranted. Ben, what advice do you have for parents in these situations in terms of taking an active role in returning the child to the school?

MASON: When a child has to leave a school, sometimes the child seeks to be withdrawn; sometimes the parents withdraw the child without the child wanting to go, and sometimes the child is expelled. The first thing that any of us have to do is to see whether that was the right thing for the child. Oftentimes it was. You have to make a very quick assessment of the situation and try to decide whether you want the child to go back to that school. Different ages and circumstances obviously make this decision very kid-specific. If it is finally decided the child would be best back at that school, an informed multidisciplinary consultation needs to take place. It may take a week, it may take a month; but if it is decided by the team as desirable, most children can be gotten back into the school where they were with a whole new set of rules and restrictions for all parties—kids, parents, teachers, administrators, psychologists, etc. When it gets to the point that the kid has had to leave a school, it is almost inevitable that you are going to have the multidisciplinary assessment that should have happened sooner anyway.

DIMARCO: A concept used in a school in Georgia was that when the child got to the point that the next step would be expulsion, the parent was required to spend an entire day with that child at school. The parent was called the child's shadow. It was very interesting how much difference it made.

VAIL: A slightly different model which I have seen work successfully in lots of places is not the model of outside people coming in, but inside people going out into the community. The school psychologist or the learning specialist runs a series of programs for parents on how to be an effective parent, how to team play so that we are all team players for the same child, how to build consistency in disciplinary terms, and how to foster language development in the young child. When schools offer this to parents, they work together on neutral, common ground with a common purpose. Schools also need to start offering this kind of education for the care-givers of young children, be they nannies, sitters, or grannies. There are lots of little children whose parents are working; many are single working parents. The parents and the school may get along beautifully, but the primary care-giver is not included in the loop. When we offer training programs for care-givers, we bring everybody together and that works.

DICKMAN: It is very important that to remember that, through life circumstances, there are a number of parents who are not able to be advocates for their children because they do not have the experience or the knowledge for any number of reasons. When we talk about early intervention with children, it is our responsibility as a community, not as a school, to see to it that early intervention takes place with our parents, so that if a child does get into trouble we have parents who are conversant in education, and all of the other things they need to be conversant in. Then they can work with the school and the multidisciplinary team. We need to remember that all parents are not immediately able to advocate for their children, and we need to take responsibility for that as a community, as well as for the children.

ST. GERMAIN: Emerson, as a representative of children with disabilities, what suggestions would you give parents as to their constitutional rights regarding the advocacy of their children?

DICKMAN: A lot of people don't realize it, but there is no constitutional right to an education. That is one of the reasons why I am concerned about what is going on

on the Hill in Washington regarding the reauthorization of IDEA. Many states, perhaps all states, have included education in their state constitutions, but it is not in the federal constitution. One of the ways that we control the quality of the educational services we are receiving is through federal funding, IDEA and P.L. 94–142, etc. It is very important from a research perspective and the dissemination of information perspective that we are not all separate islands doing our own thing—that we are doing something totally and absolutely different from New York and California. We need some consistency in the way we implement the research.

Judge Greene indicated to me that one of the frustrations an advocate has, and I am sure you as parents have, is that when you get involved in the literature and you know what is going on on the research level, you realize that our knowledge is expanding at lightning speed while our ability to deliver the services we know our children need because of the results of the research is really quite limited at the present time. Therefore, you go into the school as an advocate knowing what is needed and at the same time knowing that you are going to have to settle for something less than that, and that is a bad situation. Research is helping us in that regard. The federal government has done a great deal for us in that way. IDEA is very important. It is very, very important that everybody here get behind whatever organizations you are involved in to address the issues of the reauthorization of IDEA this year.

St. Germain: Dr. Holmes, we know here in the New Orleans area that active parent advocacy is very important to you. How would you increase public awareness of the available resources for parents and children in this arena?

Holmes: The issue of serving children cannot be fragmented. Specific disciplines with specific points of view—medical, educational, social, psychological—congruency among those is really a crucial issue.

If we make the assumption that teachers, principals, and parents as a whole want to do the best they can, then why do we fall short? Why do we do less well than we would like to? Many times it is because we don't have a model for reform at a school that has the strength of the Comer Model developed by Dr. James Comer at the Child Study Center at Yale University. I refer to the Comer Model because it is a good model. There are certainly other social, psychological, and management models, but the Comer Model builds a climate for interaction. There are multiple issues to be confronted at a school level. The Comer Model provides a framework in which to operate that accommodates good mental health, socialization, and strong academic programs. How do we accommodate the multiplicity of backgrounds and knowledge? The parental involvement that I have been speaking of falls by the wayside for at least one-third of our parents. Many of the things that I heard today, if taken at face value, would not work. Nevertheless, good strong models tend to be food for all people to some extent.

Raising children is a community issue. It is a mistake to believe that the schools can do that alone. You can't do it. A school cannot be a school until all of the agencies are there together. Do not misunderstand me, I take nothing from the school. I recognize that it is the hub of a neighborhood. It is physically a place for services to be rendered psychologically and academically, and it ought to be a very prominent place.

There is no way for the typical parent to negotiate the agencies in the school. You would need to have a lawyer, psychologist, and policeman with you to be able to negotiate many of the things that go on.

Schools are not medical institutions, and teachers are not physicians. There is a point where we ought to hire medical services. On campus, there has to be a physical place, a facility for these medical services; there has to be a budget for it, and then there is the medical services' responsibility. We may be moving in that direction, but we have to have conversation because we will have fragmentation ten years from now with all of these great models including medical and the social models. It will take public policy to marry them together.

DiMarco: Dr. Holmes said to a parents group I am involved in, "If you guys can do nothing more than help me figure out how to get more parents involved, you will have done an absolutely wonderful job." I do not know what the answer is. The parent group I am involved with mails out three hundred letters for a meeting every other month, and twelve people show up. We have PTA meetings at school, and thirty people show up.

St. Germain: You talked earlier about the Comer model and specific aspects of the Comer Model related to parent advocacy. Would you elaborate?

Smith: As part of the Comer Model, there is a structure called parent participation. I have heard us all talk about parents being involved, but I didn't hear anybody talk about parents becoming actively involved in curriculum matters. We have to have parents, if they are to be informed consumers, be very active in the school. They have to have some value added to what you want them to do. Parents oftentimes feel that the only time you want them or need them is when you want a fundraiser done at school. That turns a lot of parents off. How do I know this? Because as part of the Comer Model, we bring parents to the table with the school planning management team. Why is it parents are not involved in schools? We put it on the table. Parents do not perceive that the school is user-friendly. They perceive the school as a very hostile environment. It did not work for them, and it is not working for their children. We have to move from this element of distrust to one of trust. In reality the problem becomes more complex. We tell the parents at the table, "Yes, come into the school. We are user-friendly." Then the parents are demeaned from the moment they walk into the door until the time they leave. They will not come back.

The times have changed, but the models for parent participation really have not. We are trying to call meetings during the day, yet we know that oftentimes our parents are working, especially those in urban education. The family structure has changed. We have a number of single parent homes. If a parent has worked all day and comes home at night and has to deal with that child, they really don't have a lot of energy and time left to give to school. We have helped them by creating ways that they can get involved in school. If a parent can't come to a meeting, this is how you can help us at home: do mail-outs, stuff envelopes, etc. We have to add value. Dr. Holmes' current forums are very popular, and do you know why? They have value. Parents know the superintendent is going to be there, and when you get the superintendent out, that sends a message to the parents. We need to show parents that we need their input. A lot of times, we go from the blame model—you're the reason your child is not doing well.

We also need to look at delivery of instruction and the whole school effort, but we need to collaborate. We need to talk about it. Who knows a child better than that parent? But we, as schools, do not relate that. We do not relate to them. I, for one as a parent, hate to go into my son's school a lot of times. When I go in, I

experience school as a very hostile environment because they want to know what my hidden agenda is.

Let's talk about the power that is in place. Ultimately parents are paralyzed because they know the teacher holds the power. Parents know that if they say something that the teachers or the school does not like, oftentimes it can be taken out in that child's grades, his treatment in the classroom, by the whole school, or by the principal. I think it is ludicrous for us to sit here and not deal with these issues since we know they are very real. There have been times that parents have not gone into the school because of punitive management you know will be directed toward your child or your children. As a parent you have to be cautious. I practice what I am going to say. I go in and try to walk with a parent's posture, not an educator's posture. It is difficult. If I am treated poorly, what about somebody who does not have the education I have?

I haven't even heard anybody bring up the issue of how young parents are. We say we want them to be supportive, but have we trained them? We have some parents out there who are school dropouts who are raising children. Comer says lets first train them how to enter the school and negotiate their way through the barriers, and then let's also provide education. Once we have done that, then we will talk about what the parent can do, and we won't place blame.

ST. GERMAIN: Thank you. Do we have a question from the audience?

AUDIENCE: I have a comment and a question. I am not an educator. I am a parent. I am learning from you guys. When I think of schools, I think of walls between the parents and the teacher. I want to tear those walls down. When I think of schools, I think of the word "under." The schools are underfinanced and understaffed with underpaid teachers. There are not enough schools under construction. What can I do as a parent to change despair into hope, fear into courage, hatred into love, losing students into winners? Every student must be a winner in his or her own mind. What can I do as a parent to help?

MASON: Become a teacher.

ST. GERMAIN: Beautifully put. What you capsuled for us is the struggle that we are all here to talk about. We are not going to resolve it today because this is a process. In fact, it is a very long process, and the conversation here in this room is what we need to do. We begin to talk about resolving things; we begin to plan together and collaborate. We begin to learn how to educate young parents, and we do it over time, and it doesn't happen by some edict. It happens because good people who care for children work together. I heard Dr. Levine say something yesterday about having a reverse. When we get in a place where it is not working, we need to put it in reverse—back up, and then go forward. We will have setbacks. I spent many years as a high school principal. Many of those days when I got in my car at the end of the day, I had to say to myself, "Just put it in reverse and come back tomorrow, and start over." In terms of advocacy for children and for understanding individual differences, we do it one step at a time. The fact that you are here is encouraging to all of us. Thank you. That is the end of this session.

CHAPTER 15

Role of the Arts

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CRAMER: One of the things that we know about students with learning disabilities is that many of them are extraordinarily creative. Many artists, architects, and other people in the design field have done very well in spite of their perceived learning disabilities in school. Art plays a major role for many of our students. Therefore, how can the arts be placed in a more prominent role in the manage-

ment of children with learning and attentional problems and all school children? I throw that open to the panel.

EDWARDS: I have been recommending to art teachers to think of themselves as teachers of cognition. This, I think, places the art teacher into a different, more prominent role, and in a kind of "sneaky" way gets art teachers up there with the more traditional academic people as well. It gets art up there with the "real" subjects of reading, writing, and arithmetic. Unfortunately, as things stand now in California, and perhaps in many other states, art teachers are not being replaced as they retire, and we have lost all of our art supervisors. It seems that in many places art is being cut from the budget across the board. This is a great loss to students as art is an avenue by which to teach many higher order cognition skills.

The Getty Program is bringing art back into the schools in a rather strong way, but the Getty Program has neglected my field of interest, which is the most basic skill of drawing. The Getty Program is focused more on appreciation of art and cultural aspects of art.

My view is that if art teachers could be collaborators with their colleagues, working together, each would enhance the other. A second ambition of mine is to train regular classroom teachers in basic drawing so that they can use the skills of drawing to reach kids who learn better by means of visual/perceptual teaching.

I really do believe that gradually the arts will come back as their true worth is better understood.

CRAMER: Thank you, Betty. Will anyone else comment on their beliefs or nonbeliefs on the strengthening of teaching children through art?

STEEVES: I applaud the fact that Betty says she is trying to help classroom teachers introduce more art into the content areas. For many years I have tried to introduce an artistic element into the teaching of mathematics. For some children, a good thing has been to show a basic geometric pattern and suggest that they look for their own patterns within that pattern and see what they come up with. From the same basic pattern, different children come up with very different results. They look for certain shapes like triangles, hexagons, or squares. It is a math exercise that is very pleasing to many of them, and they cannot fail because anything goes when it's your own pattern. And pattern analysis is a useful problem-solving skill for many math problems and higher order cognition skills.

I also look at a child who is failing because the teacher says, "He never learns any math because he's always fiddling with a pencil and paper." One child whose teacher said this was drawing incredible portraits with his fiddling pencil. This kid was failing everything, not just math. Once his teachers understood his strength, they allowed him, whenever he was unable to solve a problem, to draw it. He managed to use his art to express his well thought out answers.

For a kid who couldn't learn to count, I have given the task of sewing designs. The student had to measure and count in order to complete his product. This nine-year-old did beautiful things with a needle and thread. The back of his design was neater than the front of anything I have ever sewed. It was an artistic presentation that taught him what paper and pencil could not. So we can do a lot to develop and use artistic talents in children even in the content areas.

KAHN: As a parent of a seven-year-old, it is fascinating to examine the high levels at which children are now expected to function, and the early classification of fail-

ure or lack of achievement that is placed on a child. Too much emphasis is placed on the child's level of achieving marks rather than learning.

It disturbs me because the artistic abilities of children are never allowed to really be challenged and used in the world of school, not only as a means of expression unto themselves, but also as an avenue for accessing success in core subjects.

There are children who are visually oriented and can perform and excel in the visual arts, children who have musical talents, children who have talent in dance or movement, and children who could excel in drama. All of these artistic forms, if enhanced, could be used as vehicles for the traditional academic subjects of reading, writing, and arithmetic. There are examples of many individuals who have been very successful in life because they were able to achieve in one of those areas. For so many of our children who are struggling in school, the arts could be the door that allows them to enter the room of success, to excel. There are so many elements that make up intelligence, and also many that can lead to successful performance in the schools.

In Louisiana and across the country, the arts have been missing from educational systems for so long that we now have an entire generation of professional educators, lawyers, doctors, and engineers who are illiterate in the arts, that is, really do not know that whole discipline and what is involved in it. They do not know that all of these art areas are disciplined-based areas with not only a unique set of skills but also transferable functions for other disciplines. Part of our current challenge is to cross these discipline lines.

The Arts Council is now in a model vocational job training project working with Brandeis University. We are meeting every criteria in job training in the project, and we are doing it through the arts. The Brandeis University folks came by and wanted to introduce us to a brand new educational vocational concept, portfolio evaluation. They were stunned with our instructor's quick grasp of the portfolio assessment concept. They commented that our instructor really seemed to catch on very quickly! Our instructor quietly told them of all of the research available on portfolio evaluation of which they were not aware. It is a great sadness to me that there are so many areas that we don't cross over and collaborate on. Instead, we keep reinventing the wheel. I am terribly excited to see this panel today in this context across disciplines, and I thank the conference originators for this opportunity to unite thought. I hope this is just the beginning.

We're trying to match–make. We are trying to get practicing artists who are educators involved in job training and skill development with young people. We are collaborating with the Orleans Parish School system and the Job Training Program, and we are crossing discipline areas. We're learning to speak three or four different languages. It's very difficult but very important, the kind of thing happening here today. We've got to get together and work through complex problems as a team.

GROTE: I'm an educator on the college level. The public educational system as well as some of the private and parochial schools are under fire in terms of eliminating the arts as a discipline. It then becomes the responsibility of the regular classroom teacher to include art somehow. Being a visual artist and speaking specifically on that subject, the visual arts are probably the easiest of the arts for the average classroom structure to pick up. But the minute you say to a classroom

teacher that he's going to have to teach art, his palms begin to sweat because he hasn't taken Betty Edwards' course, and he doesn't know how to draw—he's illiterate in drawing. And so he's very tense about maybe saying or doing the wrong thing.

I would put it to you to think of visual arts in terms of creative thinking. Essentially that's what making art is, using drawing, painting, or clay as a tool. The real process is the creative thought that occurs, the rearranging of the old and the conceiving of the new.

I would suggest an easy tool that we use on the college level, and that is a journal. We ask the student to put all of their creative ideas and thoughts in their journal. This is something that can be done without a big budget for art supplies or a big block of time for art that can encourage visual brainstorming. You can tell the students that this is where they should put their creative thoughts in pictures. The teacher might say, for example, to take the creative journal home and put some drawings in the journal pertaining to the history lesson covered in class today. The journal may give the teacher an insight in to some concepts that the student knows but is not capable of verbally expressing.

I am dyslexic myself, and I obviously teach in a discipline that is packed with learning disabled students. Even on the college level many art students have a difficult time expressing themselves verbally. The journal opens up a door for the faculty to create a dialogue with students about ideas they have. Keeping a journal is something that is instilled in the freshman students in the Visual Arts Department at Loyola University. They're a little reluctant at first, but by the time they're seniors, it's become their bible. They don't go anywhere without it, and they put everything in it. The important thing is it's creativity that's approached, not just the making of art, but creativity and creative thought.

MORRELL: I'm the principal of a creative arts school in New Orleans. The Orleans Parish School Board has shown a commitment to arts in elementary school for a long time through a program called Arts Connection. That program pairs off an artist working in a school with classroom teachers, and they collaborate together to come up with ways of showing children how to use art to express ideas in all areas of curriculum.

As Mark talked about journals, I smiled because we have used pictures to teach children the relationship between writing and reading in kindergarten for as long as I can remember. That's a beginning form of the journal Mark Grote described.

Another program that we're venturing into is Curriculum Based Art. We are lucky enough now to have a satellite program here. We're really excited about the possibilities and what's going to happen in the future.

Art is an integral part of the curriculum in elementary school. I've never met a kindergartner who couldn't draw.

VAIL: We need to be on guard against what I think of as "educational arrogance." I can say that because I'm an educator. Now there's thinking that a child's entire life is marked by the beginning of school and the end of school. Children, however, have very long life lines. With any luck at all there is infancy, childhood, then the school years, and then a great big piece after that. We cannot ask children with artistic talent to take that talent and put it in the freezer while they are going to school and then say, "Okay, after you graduate you can take it out and 'nuke' it and bring it back to life." It doesn't work that way.

Many children need art as an outlet for their energies which otherwise curdle, crush, or explode and end up in the courtrooms we've heard about today. Therefore, our job, our charge, is to be on the alert, to spot talent, to help our parents budget time and emotional energy, as well as money, for the exercise of talent, and then it's up to us to find places to showcase it.

THOMAS: First, the most effective teaching methods for children with learning disabilities, and those without learning disabilities for that matter, are often described as multimodal or multisensory. Broken down, that translates into visual, auditory, tactile, and kinesthetic. Those words also describe the various art fields—visual arts—both two and three dimensional, musical arts, dance, and drama. These methods are especially productive learning avenues for those students who lack linguistic dexterity.

It is incumbent on us as educators to integrate these art forms into our classrooms, and to value and utilize art as a way of consolidating and communicating what we are teaching. In misunderstanding its greater worth, our Western world has defined art in such a narrow-minded way. Art is much broader than a paintbrush. It is not the whipped cream and cherry, but a necessary and vital language through which we communicate and expand our thinking. Art production requires decision making skills in areas where there are no standard "right" answers.

Second, using the arts in schools helps children to consolidate information into long-term memory. It is a wonderful way of cross-referencing material into memory filing cabinets. Art often allows students to connect concepts to other related concepts, to weave and cross file across the disciplines from science to reading to math to history. The arts allow for experiential learning, which, in turn, allows for episodic memory to come into play. Encouraging participation in the arts to solidify a concept certainly promotes active learning as well. Art production requires an active mind.

Third, it is often argued that visualizing is an undeniable component of creative thought and higher order cognition. Visual conceptualization, then, is a complex thought process that has much value for our classrooms. Art is unquestionably intertwined with creativity which gives birth to new ideas, new directions, and new solutions. It is the opposite of rote. Art is the pathway for many students to successful, meaningful learning. It may well be the pathway to a productive lifetime profession if we encourage rather than devalue it, and if we cultivate rather than deny it the space in which to grow.

MCGEE: This tie I am wearing was created by Rachel H., age fifteen. I suspect that the tie manufacturers are ripping the Rachels of the world off—you know, Rachel is probably not getting all the proceeds that she should get. The point is that there are large businesses supported by art from children, so children involved in art could also learn a lot about entrepreneurship and business that could serve them well as adults.

I see a great number of wonderfully artistically talented children who are not being provided with a way to develop their talents. I personally teach a pottery course to young children at the Ames School in Marrero, Louisiana, and it's absolutely fantastic to see what some of these children can create.

A person can take whatever artistic talent he has and develop it further. It is absolutely essential to value and recognize artistic talent. I hate to see kids come before me who have all kinds of artistic talent that is being unused and undevel-

oped. I ask: Why can't we get them into some sort of art program that would allow them to experience success and validation? I never get a very good answer to that question. The priority for these kinds of programs simply is not here in our society. It is absolutely idiotic because all we're wanting to do is give this child an opportunity to use these skills and talents as a way to succeed in life. That's what education is all about—learning how to become productive members of society.

ARROWSMITH: Last year, the LA/CDL began an afternoon remediation program at my school with eight children who were struggling in school. Most of them were in first grade. The learning specialist who worked with them was talented and dedicated. She placed them in small groups of two to four children because they could not sit still for more than a few minutes at a time, and the teacher's attention to each one needed to be intense.

As an additional part of the program for these children provided through the LA/CDL, a local artist (a sculptor) came to work with these children with clay as the medium. He said he wanted all of the children in a large group at once. The learning specialist who was tutoring the children said, "Are you sure?" And he said, "Oh, absolutely." We put newspaper down on the classroom floor, and he sat down on the floor and worked with them. Those children did not move for an hour as they worked with that clay. I truly believe it was a real turning point for these children with their feelings about themselves and school. They created some amazing pieces which we put on display for the entire school to admire. The children's feelings about themselves soared. Anyone who witnesses that kind of positive impact on young children would put art back in our schools without hesitation.

As Priscilla Vail says, emotion is the on-off switch to learning. If we give kids an opportunity for success in school, then they begin to take down the barriers to academic learning, board by board.

In addition to experiencing success in a discipline where there is no right or wrong answer, art allows a practice field for visualization. So much of what we want children to learn requires children to be able to get the visual picture. That ability can be built up through art. Reading, math, social studies, science, sports—all of these require a visualization of the concepts. What better way to teach this than through the arts?

Being actively involved in taking the information and using it through an art project, be it visual, dramatic, musical, or dance-related, allows the child to actively solidify the concepts we are teaching. And, best of all, art makes kids happy, and learning should be fun!

CRAMER: I am sorry we have run out of time for this vigorous discussion, but I think the importance of art has been very well explained by all the panelists. Thank you.

CHAPTER 16

Role of Health Care

MODERATOR

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OSOFSKY: I am Chair of the Department of Psychiatry at LSU Medical Center here in New Orleans and a firm supporter of this summit and all of the LA / CDL's efforts.

We all have our own personal sensitivities to the issue of learning disorders. I think of the number of times over the course of my career in psychiatry where these educational questions have come up. I am reminded of a call that I received from Kansas City about a forty-year-old adult who was having difficulties. As I

looked through his chart, I saw that he had a birth weight of one and one-half pounds, and had been in the hospital for six months as an infant. As I looked at issues of his education, there were always indications of high anxiety attached to his school experience. I thought of the special issues of sensitivity and understanding that clearly were not present in how his case had been handled over the years.

One of the charges I give to our panel is the issue of how the health care workers and the schools can work better together. The overburdened teacher dealing with children with special needs, the physicians and other professionals who are often working with these children in such a fragmented way. How do people work most effectively to provide the quality interventions that are needed?

Someone once said to me, "Being a psychiatrist has obviously made you a better parent." I said, "No, I don't think that's true. I think that being a parent has made me a better psychiatrist." How do we engage parents more in the delivery of management?

Just before leaving the Menninger Clinic in Topeka to come to LSU Medical School a few years ago, the ACLD (Association for Children with Learning Disabilities) asked me if I would be willing to conduct research on the links between identified learning disabilities, Attention Deficit Disorder, and brain based cognitive problems in childhood and adolescence. Some of these problems weren't going away as these kids entered adulthood and were causing problems as they were dealing with jobs, social interactions, dating, marriage, and a whole variety of issues. Because I was then recruited to New Orleans, I wasn't able to research the connections, but it points out the obvious fact that these issues, left unattended, often continue to cause problems throughout adulthood.

The last consultation I did in Topeka was with a family that I had been told was an impossible family—they were not being cooperative, and they would not come in and work with a team. As I looked through the records, I saw some of the very difficulties we have been talking about today. The data in the charts from all around the country showed no progress being made for seven years. I called in these parents who were supposed to be such horrible people, and I said to them, "The first thing I'm going to do is talk to you as a parent. I have a big picture of all of your daughter's charts. I don't see any progress. I think of what you have been through these last years." The mother started crying, and she said, "It has been hell." She said that doctors kept talking about the progression of the family problems or this or that, and she just didn't see it. I replied, "In my experience over the years what this does to a couple can be deadly, with the blame that goes back and forth when a child isn't responding or when there is a problem." The husband said, "We almost broke up a year and a half ago." They got very quiet, and they said, "Doc, can we come in and talk with you because we're finally getting the sense you are understanding where we're coming from. We want to be good parents. We want to do the best we can for our kid."

First, Dr. Berlin. As many of you know, Chuck is one of the superb experts in audiology. Can you address this whole question of unrecognized processing difficulties in hearing and how this leads us to the question of accurate evaluations?

BERLIN: My particular area of expertise is hearing. One of the things we get involved in is children being sent to us because they are labeled as having either Attention Deficit Disorder, auditory processing disabilities, or some kind of bizarre central auditory problem. They get these diagnoses because someone has

done a screening test that showed their hearing to be normal by ordinary screening test standards. But when you talk to these children in classrooms, they don't seem to pay much attention. They have the "husband syndrome" or something when you talk to them.

When we examine these children with more detail, we find four things very commonly. The first is that the children do, in fact, have mild hearing problems. They have been missed by screening most commonly for one of three reasons. First, either the screen is set too high to pick up the model problem, or, second and more likely, the child, by common sense values, hears very clearly, so no one bothers to really do the test—they just say, "Oh, this kid hears; he's just fine." Third, they are sent to an audiologist who is sort of in a hurry, and he or she will do what's called a speech reception threshold test. They'll just say, "Let's make sound fainter and fainter and fainter, and if the child understands it he couldn't really have a problem."

To make a very long story short, let me show you what many of these children really hear like. (He demonstrates a voice in a muffled, soft tone.) They hear surprisingly well if it's quiet. What I'd like you to do now is rattle some paper, just make some noise, and I will show you why it works the way it does. (Demonstrates the same muffled voice, but this time with papers rattling loudly, overriding the sounds of his voice completely.)

Now no teacher worth his salt believes that a classroom is a quiet place.

So children are always listening under very bad noise conditions. In fact, even in this reasonably quiet hotel meeting room you are listening at a signal to noise ratio approximating eight to twelve decibels. What that means is if you have the slightest hearing loss at all like the one I just demonstrated by muffling my speech, when you are exposed to noise, your ability to understand speech plummets. Now among the men in this audience, if you are over a certain age (I won't mention exactly that cut off, but it's closer to fifty than it is to thirty) your hearing begins to go into high frequencies. What happens is you hear fine one on one, but when the washer is going, the TV is going, or the water is running, you don't hear very well. If it happens to be that you are trying to focus on one thing, and someone is talking behind you, you can't get it. That's a part of that "husband syndrome" I mentioned before because husbands have much worse hearing than wives do. That's a physiological fact; they just blow their ears away.

Anyway, to cut to the crux of the matter, many of these children, in fact, have peripheral hearing losses. There are ways to help them hear better in the classroom with various devices called system listening devices. Hearing aids are not often beneficial. Some children have good peripheral hearing and poor central hearing. We have some tests to measure that in audiology services.

What I want to call your attention to is that a routine air conduction screening (usually done by the school nurse) that shows the child to have "normal hearing" doesn't rule out an auditory problem that is manageable and addressable. As a matter of fact, that's one of the reasons why I am on this panel because the summit chairperson brought me a child who she thought had a problem like this a few years ago. That child is progressing beautifully now, and part of the reason is that her problems were named, understood, and worked with in a successful way.

Osofsky: I'd like to call on Shirley Cramer from NCLD in New York now.

Cramer: Now the important thing that I want to mention on more of the national scene is that a closer relationship is developing between the funding sources in

research at the National Institute of Health and the Department of Education, which is a very important movement forward. That had not been the case before, and as we look toward this year, NIMH and the U.S. Department of Education are now considering joint funding of research between their specific departments.

For our organization and many others, the health issue has helped to move this field forward because most of the research has been funded as a public health issue. It's unfortunate that often we talk only about education and educators, and we don't talk about the public health implications often enough in terms of how it connects. There's an important new relationship developing between health care professionals and educators. This relationship has been happening at the grass roots level for a long time but is now happening nationally, and that could make an enormous difference.

The Secretary of Health and Human Services, who is responsible for the National Institute of Health, has just agreed to chair and have her department be responsible for an interagency committee on learning disabilities which will look at collaborating in each department between Labor, Justice, Health and Human Services, and Education. The reason that HHS was invited to spearhead that effort is because they have, in fact, put the most resources into this issue in the last ten years.

Osofsky: Thank you. Dr. Ballanco is a very fine pediatrician in the New Orleans area. Dr. Ballanco, would you comment on the relationship between the pediatrician and the schools? I sometimes wonder about the types of conferences that could go on or should go on between the physicians and educators and how to think through what's best for the child. How do you go about doing that in your work?

Ballanco: I'm not sure that the issue of joint conferences has ever been well addressed. On a day-to-day basis, most of the time when I call a school or when a school calls me, we find common ground on which to work to help the youngster. The teachers seem almost always very interested in the student's well-being, and implement suggestions that I give, tell me when a suggestion I made didn't or won't work, and offer me corrections. I am then happy to offer this back in the form of a written dictum. It's a very interesting interchange that occurs when folks talk to each other as equals instead of me doctor, you teacher.

Something that has occurred in my career that is perhaps different from many other pediatricians is that for the last several years I have had a monthly meeting with an educator, a child psychologist, and a speech and language therapist. These people have taught me more about children than I ever learned at medical school. I learned an awful lot about how children think, learn, and feel. It has offered me a different perspective that has helped me to work better with children, and I hope some of the things I have given them have helped them work better with children, too. These are very fertile fields. We need to open these doors and start talking to each other. Done professionally and right, I don't think there is going to be a problem with making this happen.

The bigger problem comes with who is going to pay for it all. Our group meets monthly. Right now we don't charge anybody for this time, even though we discuss cases and design implementation plans. If I have to leave my office for half a day to go to a school to talk to a child's teachers, or if the teachers have to leave their classes for a half day to come to my office, who's going to pay for all of this? Reimbursement for collaborative consultation is a huge issue and a tremendous

block to progress. There are probably also teacher's union rules that limit the amount of time that teachers can participate in this kind of collaborative activity. So it really is a very complex issue that the bureaucrats, teachers, administrators, and physicians need to work out together for the benefit of the kids.

Osofsky: Gordon, one of the complaints against psychiatrists, often by educators, is how difficult it is for them to communicate with the psychiatrist who's dealing with children who have special needs.

Blundell: Well, I agree with Jerry Ballanco entirely, and I'm certainly very guilty of being a part of this problem, that is, the tremendous fragmentation that occurs in the treatment of these children. I usually get these children in my practice after they've hit residual fallouts of their learning disorder, those being behavioral problems and/or emotional problems. But even early on, the communication and cooperation between myself, teachers, and ancillary people who can be a tremendous help to these kids rarely occurs like it should. There are time constraints and financial constraints. Something has to be done to solve this problem.

The best setting that I've found so far for this sort of coordinated collaboration, and it is unfortunate that it is only for the sickest children, is when I work with a group of professionals when we have a patient in the hospital. Then we do have some serious communication. It's a very positive step that helps the child immensely when all the team members participate. I rarely find this degree of collaboration happening outside the hospital setting, and it's a shame because we're missing the boat there.

From a child psychiatrist's perspective, I see a tremendous resistance to accepting some of the multifaceted problems of learning disorders. I think it's similar to the lack of acceptance of mental illnesses we faced for a long time. Helping guys like Ned Hallowell and Mel Levine spread the word is one of the positive things we can do.

Osofsky: Mark Sands is Chief of Psychiatry at Children's Hospital in New Orleans, and holds added expertise by having been trained both in pediatrics and child psychiatry. Mark, how do you see this issue of how we can be providing better and more integrated treatment services?

Sands: The question of collaboration is a very important one, particularly in terms of health care and educators. For a long time, we have thought of the two disciplines as extremely different, and they really aren't. None of the interventions that we do, whether it's an education intervention, medication, individual psychotherapy or family psychotherapy, or behavior modification, ever works in isolation. All these interventions are done in a context of what happens to a child during the course of a twenty-four-hour day, seven days a week, fifty-two weeks a year throughout his/her life. We have to realize that each of these interventions is equally important. We have to work together as a team to help these children work to their optimal abilities. It's essential for all of us to communicate so we can achieve the goal of helping a child become as functional as possible.

It also reminds me of how I think about rehabilitation when I work with head injury patients. To me the issue is not what the impairment is, but rather it's what are the disabilities that come as a result of the impairment, and how can I help the individual manage these problems on their own.

For example, if you have an impairment where you can only open your hand this far, and I give you only tea cups to drink with, what's going to happen? You're

going to die of thirst. But if I get you a squeeze bottle from the local quick stop store with a long straw in it, you can drink forever and take care of yourself, and you can function in a whole host of environments. That's the key to what our collaboration is about: being able to figure out what the squeeze bottles are for the children we see that will allow them to function and be able to feel they can be successful.

No one of us has the whole answer; it's only with us working together as a team that we find the complete answer to the best management. We find the best solution through our own joint creativity to help a particular child succeed.

Osofsky: Dr. Walter Shervington is Chief of the Office of Mental Health for the state of Louisiana. Dr. Shervington, given all that's going on, what is likely to happen, what can we protect, how can one even modernize or hopefully improve services for kids with special complex needs?

Shervington: My role these days that most people want to hear about is how we're going to financially survive in the future. In some ways that's the crux of the issue for us here. As you may be aware, Louisiana is facing some rather severe funding problems. Those problems will have a major effect on service delivery in health care, not only for the poor and the indigent, but should this problem not be adequately corrected, it's going to have a major impact on the entire economy of the state of Louisiana. When you take $4.6 billion out of Louisiana's $11 – $12 billion per year budget, you have taken a very significant portion of the money out of circulation which portends horrible consequences. We are submitting a waiver to HICFA to allow us to change the nature of the Medicaid program in Louisiana. We are not doing anything actually very much different than thirty other states, and if possible, I'm sure in the not too distant future, fifty other states because of the difficulties that all states are facing that relate to Medicaid funding. For us in Louisiana it's a very special problem, though, because Medicaid funding has supported the health care establishment in all kinds of ways and certainly has supported the treatment of indigent and free care patients .

The Medicaid waiver that we're presenting to HICFA will have, for the first opportunity, a benefit in the primary care package of that for mental health services. This would mean mental health services for the not seriously mentally ill and the not emotionally behaviorally disturbed child because they will be taken care of in what is going to be a behavioral managed care plan which is separate from the overall primary care plan.

In that instance, it is an opportunity for service delivery to those groups of individuals, adults and children, who heretofore were not able to receive services from the Office of Mental Health. So many of the children that we're discussing here today would be able to receive services under this new managed care plan.

We don't know if we will have enough money to go around, so it's a real possibility that we may decide, as several other states have done, only to provide services in the category of the walking wounded as opposed to the already severely wounded children.

The other important thing you should know is that we must demonstrate that we're going to expand the population and that it's going to budget neutral over the course of five years. This means that HICFA will spend no more money over the five years than they would have spent ordinarily if you had not changed the program.

Now at the higher end, actually what we're doing is allowing those persons who generally cannot get into a health care plan to buy into a health care plan because they pay the full premium for an individual. If it's a family, they will pay probably 150 to 200 percent of the premium in order to cover the whole family.

So it's not that we are expanding—the welfare rolls are expanding the Medicaid rolls. What we're hoping to do is to expand a care plan so that we can take care of the youngsters that we're talking about here today and ensure that there is some funding base for that.

Osofsky: I deliberately saved Dr. Hallowell for last, knowing that we would like to hear him bring some of this together with his own perspectives on the issue we're talking about with this panel.

Hallowell: Well, you've probably all heard enough of me already if you were here Wednesday, and I should probably stop right now, but I'll take thirty seconds. And if you believe that I've got a bridge for you!

I don't understand public policy, and I don't understand HICFA. When people start talking these things, I realize I have another learning disability, namely an inability to listen to those people. I always just think they're lying, and it's never going to work right. So I'm glad there are good people talking about it, like the people here today who aren't lying and are trying to make it work right.

The model that I know is the model that I live, and that's the model that has me working with children, parents, and schools. I've been working in schools since I was in my medical training at Harvard, and I was placed in the Boston Latin School as a fellow. Boston Latin School is one of the exam public schools in Boston, the jewel in their crown, such as it is. The folks at Boston Latin School didn't know what to do with me, and I didn't know what to do with them. They literally put me in a broom closet which became my office where I saw kids. Over the course of the year I developed a wonderful relationship with them.

I discovered then, and I have believed ever since, that we doctors, we MD's, need to get out of our offices and into the schools. The psychologists are there. Learning specialists like Priscilla Vail live there. Social workers and nurses have been there, but the MD's have not been there.

The MD's have stayed in hospitals and clinics. I think we're shy to begin with, and then we learn how to be arrogant on top of that, so we don't go into schools. We're afraid of being on the open prairie where we can be taken in and asked questions at any moment. But we need to go there.

The model that I would love to see and I know would be cost effective is to bring the clinic to the school. Who's going to pay for it is the question? I think it would end up paying for itself, if you had these assessments done on-site in the school by a multidisciplinary team where the teachers could go to the assessment. It would just mean walking down the corridor, and this huge communication gap could be instantly closed. The doctor could be there, the psychologist could be there, and the learning specialist and the teacher could participate in the evaluation and formulation of the treatment plan. Do it on-site. Have a half-day a week be clinic day in the school. It would save money in the long run because you have all these evaluations being done hither and yon never being brought together and never being sorted out. How are the designated people supposed to implement them?

If you did it on-site, it would also be wonderfully exciting for everyone involved. The teachers are dying to talk to us; I have no idea why, but they are.

They really want to talk to the child psychiatrist. All the psychiatrist or the pediatrician has to do is go to the school. That's where the action is.

That's the model I favor. I hope the day will come when every school will have its own assessment unit on site in the school.

Osofsky: We've run over the time limit allocated for this panel, so I suggest that people meet with the panel members individually during the break.

Thank you all.

CHAPTER 17

Justice

❦ ❦ ❦

MODERATOR

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GREENE: There is a lot to be said by this panel. Some of you will be surprised about the federal and especially Louisiana's state law, so I think we are ready to begin.

DRELL: I want to start by asking Mr. Dickman to speak about the issue of Section 504 of the Rehabilitation Act.

DICKMAN: Both Section 504 of the Rehabilitation Act, a civil rights provision, and IDEA, The Individuals with Disabilities Act which essentially replaced the landmark disabilities law named PL 94–142, apply to public education. For children with a learning disability, the greater protection is under IDEA, or 94–142, if you are used to using that name. Section 504 and the Americans with Disabilities Act (ADA) are not quite as important because they don't have as many protections built in. However, there are disabilities and handicapping conditions covered by Section 504 that didn't rise to the level of being considered educationally handicapping under IDEA. The federal government has determined, for example, that Attention Deficit Disorder and its various forms falls under Section 504.

As Dr. Levine said earlier today, it is very rare for the various disabilities that our children suffer to exist alone. Comorbidity is more the rule than the exception.

In my experience as an advocate, I have very rarely found a situation where I have had to deal with a school district under 504 for an Attention Deficit Disorder child because of the rarity of not finding some level of learning disability as a comorbid disability.

On the other hand, if on those rare occasions a child has only ADD/ADHD, since the federal government has determined that ADD/ADHD is not a learning disability, per se, advocates have to go for accommodations under 504, the civil rights act. What that means especially is that the school district is required to perform an assessment if it is reasonable to suspect a handicapping condition exists. If the assessment indicates that the handicapping condition, that is Attention Deficit Disorder, exists, then reasonable accommodations have to be supplied by the school for that particular youngster. The reasonable accommodations that are supplied under 504 can very well be similar to those that would be applied to a child with comorbidity under IDEA or 94–142.

DRELL: I want to move on to C. W. Lartigue to speak about Louisiana's Law 854.

LARTIGUE: Louisiana is very fortunate to have a strong dyslexia law. Parents and students in other parts of the country have to rely solely on Section 504. We have a law that is very specific to dyslexic students in our revised Statute 1707, Section 11. The law provides that any parent, teacher, or in some cases the student himself can bring to the attention of anyone in the school, the principal or a teacher, that they are having a learning problem. It doesn't have to be dyslexia, just some learning problem. Then the SBLC, the School Building Level Committee, convenes. That committee takes on different names in different sections of the country. Members of the SBLC look at the student's records, evaluate teacher recommendations, and listen to the parents. Although the parents do not have a legal right to be included at this meeting, they are often asked to participate. The committee recommends modifications and accommodations for this particular student. After these are implemented and they work, the law stops there. Nothing happens. If the interventions don't work, then the child is assessed for dyslexia. If the assessment is positive, the child is entitled under the law to multisensory instruction of a very specific nature. Educators would be more familiar than I with the specific nature of Louisiana's multisensory instruction and explain it better to parents who are interested. If that works, it stops there. If that doesn't work, then there is a recommendation to special education for a 1508 evaluation—a full evaluation to deter-

mine eligibility for special education services. That evaluation is then done. The law is quite specific. The school system has sixty days from the initiation of a request to a final assessment of a child for dyslexia.

SONIAT: Our office has been heavily involved, along with the Office of Special Education Services, in putting into effect Louisiana's dyslexia law. Additionally, we have been heavily involved in training team members in our local school districts about what the real responsibilities of districts are under Section 504. We have come a long way since 1990 which is when we were entangled in an OCR, Office of Civil Rights, investigation in Louisiana. We had some problems with children being evaluated for special services and evaluations not qualifying them. Often we were not doing anything different in our regular education program to meet their needs. We did know from the evaluations that we had children who had reading differences. So that is what happened in Louisiana in 1990. At the same time, the dyslexia bill was going forward in the state legislature.

We have a massive chore ahead of us. We have been trying to train teachers and administrators in the regular education program about learning disabilities, learning differences, and how to accommodate them. We are worried about changing attitudes because there are negative attitudes out there. People still say that these things don't exist, that the "D" word, dyslexia, does not exist. We are working to provide good research information to our teachers and principals regarding dyslexia and ADD/ADHD.

One of the major issues for us in dealing with Louisiana's dyslexia law and Section 504, as you may know, is there is no federal funding. We did not have the luxury of time and money on our side. How much better it would have been had we been able to train our teachers appropriately in multisensory instruction before we had a mandate issued to us. I have come to recognize in the last five years, however, that sometimes it does take that necessary jolt to get us to move. We were guilty in regular education, again, of not looking closely enough at the individual needs of children.

Another thing I want to point out is that this has stimulated a rebirth for us in Louisiana of the importance of school based teams, called School Building Level Committees in Louisiana. We also now have 504 Committees in some Louisiana school districts. The importance of this is incredible.

We need funding to be able to do more training with our School Building Level teams. None of this will mean anything if we can't get our teachers properly trained. Major issues for them are about evaluations—how do we do it and what are we supposed to do. The other major issue is time—when are we supposed to do this. Issues such as collective bargaining sometimes drive systems in ways that are not always in the best interests of children, but we have a lot of creativity going on in many of our districts, where they are rearranging teacher time, allowing half-days on Fridays so that school building teams can meet, conducting evaluations, bringing in parents, and consulting with other teachers to make things happen differently for children.

We know we have made some strides, but we also have a long way to go. We are very well aware of 504.

DRELL: You said that people still don't believe in the "D-word." What do you think goes into that? Is it just education or are there other things going on?

SONIAT: A lot of teachers came through teacher training programs a long time ago,

particularly reading programs where things like dyslexia were not discussed. It was not recognized as a real disability or a difference. We have come a long way in five or so years by setting the record straight. Obviously the research and the work of groups like the Orton Dyslexia Society have gone a long way toward helping to educate people. Education is no different than any other profession. We need to have continuing education for our people. Teachers need to be well versed in current literature and research. Unfortunately, we know that has not always happened. In Louisiana, we have been about the business of getting new research information to principals and teachers.

DRELL: Does anybody else on the panel have any comments about this?

DICKMAN: One of the reasons why it is getting a little easier for some of us to use the "D" word is because the federal government, through NIH, the National Institute of Health for Child Health and Human Development, has funded longitudinal studies on dyslexia and methodology that are used for dyslexic students. These studies have gained a great deal of recognition throughout the United States. There are three major longitudinal studies now that have been going on for about four years that are publishing spectacular results. That is one of the reasons why we are able to use the "D-word" now. Because it is real. Dyslexia exists.

Louisiana, by the way, has had a great deal to do with the movement forward. Louisiana, California, and Texas are the first states to use the word "dyslexia" in legislation and to author an individual definition that allows people to speak about the disability with everyone talking about the same thing at the same time, at least within that state. More of this is beginning to go on nationally now in the same manner, thanks to Louisiana.

DRELL: Kids with conduct disorders—there is a subgroup within Attention Deficit/Hyperactivity Disorder. Longitudinal studies show that a large percentage of them end up knowing Mr. Judge or Ms. Judge, and frequently end up in prison. The second question that we have today for the panel is to talk about the intersection between those two things. We wanted to start with Mr. Gerkin talking about the issues of learning disabilities, reading disabilities, and those issues in the parish prisons.

GERKIN: I want to talk briefly about kids for whom mandated services such as those we have discussed through the school system are not going to be effective because they spent a lot of time out of school. They don't go to school, and for a variety of reasons, they are out of reach. Maybe the services at one time could have helped earlier on, but they have finally reached a point at which all the state and federal mandates for rehabilitative services through schools are basically a waste of time with regard to these kids.

First of all, we need to recognize the involvement of juveniles in crime in urban areas—specifically, their involvement in violent crime which has increased dramatically recently. By recently, I mean since about 1986–87. From about 1960 through about 1993 in New Orleans, it has gone up rather dramatically. The juvenile murder arrest rate has gone up by a factor of about six in that period of time. Sometime during their juvenile years right now, about 10–15 % of males in the city of New Orleans will be arrested at least once for a violent crime. Unlike property crimes and the crimes of the past like joy riding (a minor arrest where a kid would not spend too much time incarcerated) when juveniles are convicted of these violent crimes, the judges don't have much choice but to lock these kids up. As a

result, these kids move to a point where the only institutions that will be providing services for them are penal institutions. We run an emergency juvenile detention here in New Orleans. We are not mandated to do so, but we have been doing it since the mid-80's. We find that a lot of these juveniles do have disabilities. For example, a much higher percentage of inmates test positive for far-sightedness, both juveniles and adults, than in the general population. Most of these individuals have never had glasses before, so we get them glasses. This is just an example of the kind of disability which may be behind some of the histories of some of these people. The way to provide these services is either through purely medical services in institutions or through the local school board which is mandated to provide educational services just like they do for other kids. We don't get the full range of psychoeducational evaluations and related services that we think we should or are mandated to receive, but we do get some of those services.

Drell: If they don't have glasses by the time they are with you, that means that they did not have glasses when they were in school. Does Section 504 have anything to say about glasses for kids?

Lartigue: Glasses would be considered a personal appliance I would think, wouldn't you think Emerson?

Dickman: Just recently, Tom Hehir, Director of the Office of Special Education in the U.S. Department of Education, has come out with an opinion from the Office of Special Education that school districts can even be found liable for buying batteries for hearing aids, as an educational necessity. So glasses would seem to fall into the same category. This is a now growing area and certainly one that has a tremendous potential for expense. It is something that is being looked into by the federal government, and it seems to be coming down on school districts being responsible for providing appliances such as glasses and hearing aids.

One other comment I want to follow up on. Some of the research that I have seen indicates that about 50% of adolescents under court supervision have a learning disability. This is a tremendous support for the need for intervention. We are talking about kids who perceive themselves as being bad because of all the things we have heard at this summit for the last three days.

These kids are not good at being bad. They sign their name to graffiti, for instance. They don't run away when the other kids run away. They look guilty, and they lie badly. They find themselves in trouble while the kid who was standing next to them who did exactly the same thing is at home watching television with his parents and going to school the next day. We have a difficult problem. We have to identify the children with learning disabilities and give them the kind of intervention they need, so that we do not have to wait until they fail.

Drell: You give me great *segue*. Speaking of guilt, Judge Gray what would you like to speak about regarding this population?

Gray: I would agree that our laws provide an opportunity for early intervention. My concern is that when we get these kids in the court, the feeling is that we as a community have given up on them. I see juvenile court as being their last opportunity to have the glasses, hearing aids, evaluations, and services that ought to have been provided but have not been, and I see the court as having the ability to fashion orders that are designed to meet the needs of those children, assuming we are able to get the needed information. What we need to begin with is to make

sure that there has been an evaluation or an assessment. If there has not been an assessment, and we believe that there may be some learning disabilities, then what the court ought to do is order an evaluation or an assessment. I try to give these cases to the schools, but unfortunately, sixty days may pass from request to assessment, and frankly, I don't known that I have ever gotten one in even that period of time. There must be some mechanism in the law where they don't have to comply within the sixty day time period because I don't get them. If the sixty days is in the statutes, we need to get them within sixty days. Then, when I get the assessment, I believe that I have the authority, if I am putting a kid on probation or if I am committing him, to say to the institution or to the probation department, "This is the help the kid needs, and I expect that the kid to get that help while they are being supervised on probation."

LARTIGUE: I don't want to mislead the court, so let me say that it is sixty operational days, and, depending upon when you ask for the evaluation or the assessment, such as prior to Christmas holidays, it can stretch out pretty far.

GRAY: Part of my frustration is that I think we play games with this statute. If we are at April, which is when a lot of problems happen in the school year, we are at the end of the school year. We can make the assessment at the end even though we know we ought to make it earlier. We don't make it earlier. We make it at the end of the year, and then we have to wait all summer. Then, when we get back at the beginning of the school year, we start the process all over.

I am frustrated because we are now saying we want to pick these kids up, lock them up, and send them away forever. We are not doing what we ought to be doing on the front end to address some of these problems. If we did what we are supposed to do with all of these statutes and all of the services that we say we want to provide, if we truly provided these (I don't mean lip service), then things might change. It is not going to change by spending more money for jails and prisons. It is not going to change that way.

DRELL: After hearing that, why don't we go to Representative Kennard and let him speak to the role of the Legislature in this area.

KENNARD: I am an educator. I was in the classroom for years and am now on the university level. Last year we had a special legislative session on crime. The juvenile justice system in the last twenty years has collapsed. The adult murder rate in the last ten years has increased 5.2%. In the juvenile system, the murder rate has increased 65% in the same ten year period. There is a ratio of one probation and parole officer to 125–140 people. We need help in this area. The joint budget committee put a pencil to it, and in order to improve that probation and parole system, we need to come up with around $30 million, just to get enough officers to supervise these people. Our juvenile justice and probation system needs help. There is about a 62% repeat failure rate with these kids when they get out if they have been incarcerated. In other words, when they get out, 62% are going to commit a crime again, probably within three years.

Discipline in the classroom is a real problem. A survey in the Baton Rouge area showed that 65% of the teachers had to remove at least one or more students that disrupt their classes in a three month period, and 17-18% had to remove seven or more within a three month period. This is an alarming statistic. Four out of six kids who are twelve years old today will be assaulted sometime in their lifetime.

We do have a problem. We must face it head on. This state is spending $33

million a year just on remedial education for kids who are in college at LSU (Louisiana State University). It is alarming that we are having to spend that much money, taking that much money away from higher education to provide remediation for kids in math and English who can't read.

Just like Judge Gray said, building more prisons and jails is a very costly way of doing business. Virginia passed the Truth in Sentencing Law which says that 85% of the time a person is sentenced for must be spent in jail. Now they are looking for $2 billion in order to fund the jails.

As a member of the joint budget committee, whenever we are under a mandate and we are told we have to do something, our job is to come up with the money. We have a real problem with juveniles. As far as the funding, we are sitting ducks. We have to do what we are told to do. We are trying to do what we are told to do. It is very difficult, with crime increasing the way it is, to fund these programs.

LARTIGUE: The law does not excuse the lack of services or a refusal of services due to lack of funding. Period.

DRELL: Representative Kennard, what is your response to that as a legislator?

KENNARD: We are looking at a billion dollar deficit right now in Louisiana in the Medicare area. I know funds have to come from somewhere. It is very difficult to find them at this particular time.

SONIAT: I think we have to think smarter with what we have. With the federal government relaxing some of the restrictions on some of our major funding streams, we are going to see some movement. There are districts in Louisiana that have successfully brought down those barriers between funding streams and categorical programs. The only way we are going to make a difference is to bring those barriers down between those funding streams. We are not going to get a major new influx of dollars anywhere. With Goals 2000 money, Chapter I money, and the special education monies that are here, there are ways to make a difference for all children.

MCGEE: I am not sure whether I have misheard entirely, but blaming problems in the juvenile justice system for the increase in problems with juvenile crime is a little like blaming AA for alcoholism. The juvenile justice system is an after-care program. What we need is intervention so that these children do not get into the juvenile justice system to begin with.

AUDIENCE: What is the sense of suspending or expelling children so they have more time on their hands or get into trouble?

KENNARD: When the kid is suspended from school for whatever time period or expelled permanently, it really compounds the problem. That kid has too much idle time on his hands from 7:30 in the morning until 4:30 in the afternoon. Of course, that kid is going to influence other kids, as a domino effect transpires. You definitely have a good point there that expulsion and suspension tend to compound the problem for juvenile delinquency.

AUDIENCE: I am Dr. Alta Brown, Assistant Superintendent for St. Tammany Public Schools in Louisiana. No one talks about how we are mandated to comply with 504 and how we are mandated to comply with Louisiana's dyslexia law. We know we didn't get any money to help with this compliance, but we keep training. When you are a third grade teacher and you go into a classroom every day with 26

kids, there may be 15 or more out of the 26 who have some learning problem. When can we put some money into lowering the student-teacher ratio?

DRELL: Judy Watts, did you want to say something?

WATTS: Just in case you thought it couldn't get worse, it can. Just in case you thought we didn't have any money now, we could have a lot less. I want everyone to be really clear that the U.S. Congress will begin voting soon on something called the Balanced Budget Amendment which would have the nation's budget balanced within the next seven years. This would have to be ratified by 34 of the states because it would be a constitutional amendment. Ultimately passage of the balanced budget amendment would mean that we would have to find $1.4 trillion over the next seven years, adding the promised tax cuts. Half of the budget is off limits because it includes defense spending, social security, and interest on the debt. So, the money cut has to come out of the unprotected half. It is going to come out of social services and protections for children, families, and vulnerable populations. I understand that this would also impact the money that states get from the federal government for things like education and health care. I strongly urge you to go home and call your U.S. representative and senator. Urge them strongly to vote against the balanced budget amendment because I believe it will be the death of children in this nation.

DRELL: Judge Greene, do you have some concluding remarks?

GREENE: The theme of this summit has been "Transforming Crisis Into Success: Making the Connections." Not only in law, but also in medicine, and in every area where you have to solve a problem, the very first step is recognizing and defining the problem, that is, stating the problem so that everybody can understand what the problem is. Here, for the last three days, we have stated the problem which is one of learning differences and learning disorders.

We know the effect of that problem is that 83% of the affected population will develop secondary emotional problems, and 50% of the juvenile delinquents have learning disabilities. That is the effect of the problem.

We have also heard that medicine has moved at warp speed which has really helped in overcoming this problem by finding solutions. Solutions do exist now even though fifteen years ago they did not exist. That was also covered in this summit.

Now, we can look at all of this as a problem, or we can look at it as an opportunity. We are all striving to make the world better and overcome the problems that are caused by learning disorders. We have the technique and the ability to overcome. The next step is that these techniques need to be continuously refined and expanded on. Then, the next step is implementation.

We can get mad at each other. We can point fingers. We can say we have no money. We can say our government is failing us. We can point fingers all we want to. That never will solve a problem. What we have to do in summits like this is disseminate the information which is collected in so few minds. We have to disseminate that information to the public so it can be digested by the public and by our legislatures. Then we have to have a collective effort at overcoming our problems. I, for one, think the private industry can help greatly in the effort to overcome them. Private citizens, with our cup half full, are looking at this as an opportunity to better mankind. Thank you.

Epilogue

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By uniting, we will begin to celebrate diversity in a more authentic way. In so doing, it is my hope that the term "learning disabled" will become obsolete in the decades to come. Literally, the term means "not able to learn." We all know this simply isn't so. Children currently described as learning disabled certainly are able to learn. In the truest sense, it is we who are disabled—not able—if we are unable to understand, teach, and respond to the diversities of our children.

For thousands of years, farmers have understood that different soils and climates are best suited for different kinds of seeds. When the land is properly cultivated and used for what it is best designed for by nature, the greatest harvests are reaped. Now, as we learn together about the fertility of the human mind, it is hoped that we will see that, properly managed and cultivated, different minds will produce magnificent products.

Plain Talk about K.I.D.S. 1997, to be held in New Orleans, Louisiana, will continue the dialogue begun at *Plain Talk 1995*. We promise a forum for provocative and powerful dialogue to further explore and synthesize educational, legal, and medical theory and research. For further information, contact the Louisiana Center for Development and Learning. Join us in the collaborative cultivation of these fertile fields.

—Alice Thomas

APPENDIX

Resource Organizations

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The following organizations that provide assistance to children and adults with learning disorders and assistance to professionals who work with this population were represented at the summit:

Louisiana Children's Research Center for Development and Learning (LA/CDL)
208 South Tyler Street - Suite A
Covington, Louisiana 70433
Telephone: 504–893–7777
FAX: 504–893–5443

National Center for Learning Disabilities (NCLD)
381 Park Avenue South - Suite 1420
New York, New York 10016
Telephone: 212–545–7510

Learning Disabilities Association of America (LDA)
4156 Library Road
Pittsburgh, Pennsylvania 15234
Telephone: 412–341–1515

International Orton Dyslexia Society (ODS)
Chester Building
8600 LaSalle Road - Suite 382
Baltimore, Maryland 21204
Telephone: 410–296–0232

Children and Adults with ADD (CH.A.D.D.)
499 70th Avenue #308
Plantation, Florida 33317
Telephone: 305–587–3700

American Speech-Language-Hearing Association (ASHA)
10801 Rockville Pike
Rockville, Maryland 20852
Telephone: 800–638–8255

About the Authors

I. Health Care

Chapter One

MELVIN D. LEVINE, M.D., FAAP

Dr. Mel Levine is a professor of pediatrics at the University of North Carolina School of Medicine where he is Director of the Clinical Center for the Study of Development and Learning. Dr. Levine graduated summa cum laude from Brown University and was a Rhodes Scholar at Magdalen College, Oxford. He graduated from Harvard Medical School and completed residency training in pediatrics at the Children's Hospital in Boston. He served with the United States Air Force as a pediatrician at which time he received the Meritorious Service Award for this work with children. Following his military service, Dr. Levine was Chief of Ambulatory Pediatrics at the Children's Hospital in Boston for fourteen years until he assumed his present position in North Carolina. Dr. Levine has conducted considerable research and written many books, including *Developmental Variation and Learning Disorders* (1987), *Keeping A Head In School* (1990), *All Kinds Of Minds* (1992), and *Educational Care* (1994), all published by Educators Publishing Service, Inc. In addition, he has been actively involved in educating pediatricians, educators, and others to understand childhood neurodevelopmental variation and its effects. He is currently conducting projects called SCHOOLS ATTUNED and DEVELOPMENTARY SCHOOLS which are designed to enhance the abilities of teachers to deal with children who have academic difficulties. He has been actively involved in the design and validation of new diagnostic instruments that integrate neurological, behavioral, developmental, and health findings in children with learning difficulties. Dr. Levine is an unwavering child advocate. He is particularly concerned about the lives of young people whose innate characteristics are not well understood by adults or by the children themselves. He serves on the national advisory board of CH.A.D.D., the professional advisory board of the Louisiana Children's Research Center for Development and Learning (LA/CDL), and is an honorary advisory board member of NCLD.

Chapter Two

EDWARD M. HALLOWELL, M.D.

Dr. Ned Hallowell is a child and adult psychiatrist in private practice in Cambridge, Massachusetts. He is a graduate of Harvard University and Tulane Medical School. He completed his residency at Harvard Medical School. He is presently on the faculty of the Harvard Medical School, and he consults to numerous schools both locally and nationally. He is the author of *Driven to Distraction: Recognizing and Coping with Attention Deficit Disorder from Childhood through Adulthood* (1994) and *Answers to Distraction* (1994), both published by Pantheon, and co-author of *Finding the Heart of the Child*, published by AISNE (1993). Dr. Hallowell serves on the national advisory board of CH.A.D.D. and the professional advisory board of the Louisiana Children's Research Center for Development and Learning (LA/CDL). He is married to Sue George Hallowell, who is a social worker, and is the father of Lucy, age 5 and Jack, age 2.

Chapter Three

GERARD BALLANCO, M.D., FAAP

Dr. Ballanco is a native of New Orleans. He graduated from LSU Medical School, completed a surgery internship in Denver, and spent three years in the Army Medical Corps as a general medical officer. Since completion of his pediatric residency in 1974, he has been in general pediatric practice with the Rothschild Pediatric Group, now the Rothschild/Ochsner Pediatric Clinic. In 1990, he completed a mini-fellowship in learning and behavior problems with Mel Levine at the University of North Carolina, Chapel Hill. He has co-authored publications in *Pediatrics, Journal of Pediatrics*, and *Pediatric Infectious Disease Journal*. He has served on the professional advisory board of local CH.A.D.D. chapters, and currently is on the Board of Directors of the Louisiana Branch of the Orton Dyslexia Society and the Louisiana Children's Research Center for Development and Learning (LA/CDL). Forty percent of his practice time is spent working with children with developmental variation and learning disorders.

II. Education

Chapter Four

BETTY EDWARDS, Ed.D.

Betty Edwards has been Director of the Center for the Educational Applications of Brain Hemisphere Research at California State University in Long Beach since 1984. She has been a professor of art at the same university since 1979. She has been Professor Emeritus in Art at California State University, Long Beach since 1991. Among her publishing achievements are *Drawing on the Right Side of the Brain*, which is widely used as a textbook in a variety of disciplines and has been translated into ten languages, and *Drawing on the Artist Within*, which has been translated into eight languages. She continues to pursue developing and making available teaching techniques that enable individuals to gain better access and control of visual perceptual modes of cognition.

Chapter Five

PRISCILLA VAIL, M.A.T.

Priscilla Vail is the learning specialist at the Rippowam-Cisqua School in Bedford, New York. Her work centers on the identification of different learning styles and their accommodation in the regular classroom, small groups, and individual work. She did her undergraduate work at Vassar and Sarah Lawrence, earned both her B.A. and M.A.T. at Manhattanville College, and did post-graduate work at New York University. She gives teacher training and parenting workshops in this country and abroad for individual schools, public school systems, and such organizations as N.A.I.S., I.R.A., Bank Street College of Education, Teacher's College of Columbia University, the Bryn Mawr Child Study Institute, the Principals' Center at the Harvard Graduate School of Education, Cambridge University in England, Learning Links International, and the International Orton Dyslexia Society. She is on the board of the Fisher Landau Foundation for gifted learning disabled students, the education committee of the Mystic Seaport Museum, and the professional advisory board of the Louisiana Children's Research Center for Development and Learning (LA/CDL). Her books include *Clear and Lively Writing; Gifted, Precocious, or Just Plain Smart; Smart Kids with School Problems; About Dyslexia: Unraveling the Myth; Common Ground: Phonics and Whole Language Working Together; Learning Styles: Food for Thought and 130 Practical Tips,* and *Emotion: The On/Off Switch for Learning.*

Chapter Six

KATHARINE BUTLER, Ph.D.

Dr. Katharine Butler holds a Ph.D. in Hearing and Speech Science from Michigan State University, and a B.A. and M.A. from Western Michigan University. She is a research professor in Communication Sciences and Disorders at Syracuse University, New York, and Director of the Center for Language Research in the School of Education. Additionally, Dr. Butler is the Director of the Center for Educational Research on Dyslexia at San Jose State University, California. She is currently President-elect of the American Speech-Language-Hearing Association and past President of the International Association of Logopedics and Phoniatrics. A prolific author, she has more than 175 publications, including 10 books. Her most recent publication is *Language Learning Disabilities in School Age Children and Adolescents* (Allyn & Bacon, 1994) which is co-authored and edited with Dr. Geraldine Wallach. She is senior editor of *Topics in Language Disorder,* a quarterly interdisciplinary journal, now in its fifteenth year and a book series entitled *Excellence in Practice* (Aspen Publishers).

Chapter Seven

JOYCE STEEVES, Ed.D.

Joyce Steeves taught for many years in both Scotland and England before coming to the United States in 1974. For thirteen years she was a language therapist at the Jemicy School in Maryland. She received her Ed.D. at Johns Hopkins University in Baltimore. Her doctoral studies concerned the high abstract reasoning abilities and computational inefficiency of dyslexic students.

Dr. Steeves has taught at Johns Hopkins since 1976, and is presently a professor and teacher trainer supervisor. Dr. Steeves recently spent a year as a visiting professor at the department of special education at the National Taiwan Normal University as part of a joint program between JHU and NTNU. As a member of the Orton Dyslexia Society, Dr. Steeves has traveled to most states in the U.S. to help teachers learn about and fulfill the potential of the dyslexic child. She has held the post of treasurer and is currently vice-president of the International Orton Dyslexia Society.

III. Justice

Chapter Eight

THOMAS P. McGEE, J.D.

Judge McGee is the presiding judge of the juvenile court in Jefferson Parish, Louisiana. He has been particularly active in bringing up-to-date information about learning disabilities to family court judges in presentations around the country and as a lecturer at the National Colleges of Juvenile and Family Court Judges, Reno, Nevada. He serves as Chairman of the Learning Disabilities Committee for the National Council of Juvenile and Family Court Judges. Known for the personal interest which he takes in the young people he encounters, Judge McGee devotes time to preventive approaches, including mentoring programs, scuba diving, and pottery. He is a member of NCLD's professional advisory board and serves on innumerable boards in the state of Louisiana, including the Louisiana Children's Research Center for Development and Learning (LA/CDL) and the Louisiana branch of the Orton Dyslexia Society.

Chapter Nine

G. EMERSON DICKMAN, III, J.D.

Emerson Dickman is an attorney who, for seventeen years, has specialized in the representation of children with disabilities and their families, including advocacy and special needs planning. Among the cases he has handled are New Jersey's leading precedent protecting the due process rights of students in special education in 1989, and the leading precedent declaring and protecting the constitutional rights of adults with developmental disabilities in 1993. He is a member of the national Board of Directors of the International Orton Dyslexia Society, the professional advisory board of the Louisiana Children's Research Center for Development and Learning (LA/CDL), Government Affairs Committee Chairman of the New Jersey Arc, and a board member of the NJP&A, Inc., recently designated by Governor Whitman as the protection and advocacy system for the state of New Jersey. Published articles include "Success and Happiness: A Goal for All Children" in the *Exceptional Parent*, "Adoptees Among Students with Disabilities" in the *Journal of Learning Disabilities*, and "Inclusion: A Storm Sometimes Brings Relief" in *Perspectives*. He has been the recipient of several awards for his work in the disabilities field.

IV. Family

Chapter Ten

ALICE P. THOMAS, M.Ed.

Alice Thomas is the founder and executive director of the Louisiana Children's Research Center for Development and Learning (LA/CDL). She completed her B.S. and M.Ed. degrees at LSU. In 1990, she completed a mini-fellowship in learning and behavior problems with Dr. Mel Levine at the University of North Carolina, Chapel Hill. Over the last 25 years, Mrs. Thomas has been a teacher, counselor, and intervention specialist in public school systems in Texas, Mississippi, and Louisiana. She has been an active community volunteer, having served as president of the St. Tammany Youth Service Bureau, the St. Tammany Art Association, and the Jefferson Parish Guidance Association. Additionally, she has served on the advisory board of the local CH.A.D.D. chapter, and serves on the advisory board of the Center for Educational Research on Dyslexia at San Jose State University, California. Mrs. Thomas believes that professional development must play a key role in helping children with learning and attentional disorders, and has conducted numerous teacher training sessions over the past seven years. She is an unswerving child advocate who is committed to celebrating diversity. She is married to David Thomas and is the proud parent of two incredible children, Russell, age 15, and Amanda, age 11, both of whom have nontraditional learning profiles.

ANN KORNBLET

Ann Kornblet is the current president of the Learning Disabilities Association of America (LDA) which is "a national, not-for-profit, volunteer organization including individuals with learning disabilities, their families, and professionals. It is dedicated to enhancing the quality of life for all individuals with learning disabilities and their families, alleviating the restricting effects of learning disabilities, and supporting endeavors to determine the causes of learning disabilities. LDA seeks to accomplish this through advocacy, education, research, and service, and through collaborative efforts." Married and the mother of three children, Mrs. Kornblet has been active for fifteen years with the LDA in a variety of capacities both at the local and national levels. She currently serves on the Special Education Advisory Panel for the state of Missouri. She became active in the field because of the impact of learning disabilities on one of her sons and has moved several times seeking appropriate services for her child who has been placed in private, parochial, and public schools at different times over the past fifteen years.

"The summit and the resultant publication represent a perceptible breakthrough. We are clearly penetrating beyond the global categories that demean children and into a frontier in which stigmatizing pathological models will be succeeded by an authentic understanding of individuality and its implications for the redemption of struggling children."

Melvin D. Levine, M.D.
Clinical Director, Center for Development and Learning
University of North Carolina Medical School
Chapel Hill, North Carolina
Author of Chapter One

*"**PLAIN TALK ABOUT K.I.D.S.*** is a rich resource of stimulating collaboration across professional disciplines. Thoroughly thought provoking, it provides fertile ground for humane management as we work to understand and respond to struggling children. It is a mandate to professionals and parents to synthesize their expertise."*

Edward M. Hallowell, M.D.
Child and Adult Psychiatrist
Professor, Harvard Medical School
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Author of Chapter Two

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Priscilla Vail, M.A.T.
Learning Specialist, Pippowam-Cisqua School
Bedford, New York
Author of Chapter Five

*"**PLAIN TALK ABOUT K.I.D.S.*** brought together those who know and those who wanted to know. The resulting proceedings brings to those who could not be present an opportunity to join the summit and to be part of a group of researchers, practitioners, parents and professionals who gathered under the same roof to produce practical solutions to difficult problems."*

Katharine Butler, Ph.D.
Research Professor, Program in Communication and Disorders
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